



**KASIKORNTHAI**

# KBank's TCFD Report 2023

Task Force on Climate-related  
Financial Disclosures



ธนาคารกสิกรไทย  
开泰银行 KASIKORNBANK



บริการทุกระดับประทับใจ

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# Introduction

2023 breaks records not only as the hottest year since global measurements, but also with peak severity of climate physical impacts such as extreme heat, ocean storms, wildfires, flooding, droughts, and landslides, taking away tens of thousands of lives as well as health and wellbeing securities. Climate disasters are also estimated to impose significant global economic costs of at least \$200 billion annually over the last decade, with Thailand is ranked third in % GDP loss from climate events.

“Climate breakdown has begun”

– UN Secretary-General António Guterres

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) Synthesis Report Climate Change 2023 states “pace and scale of climate action are insufficient to tackle climate change”, projecting that current pathways will lead to 3.2 °C global warming by 2100 instead of the 1.5 °C to prevent worsening and potentially irreversible adverse impacts to human well-being and planetary health at a horrifying speed. The report confirms that risk levels are higher than AR5 assessments, and long-term impacts are expected to multiply many-folds for any global warming scenarios. In contrast, the global economic and social benefit of limiting global warming to 2 °C, including for human health and the benefits of damages avoided, exceeds the cost of mitigation. The IPCC urges governments and economies for the will to execute readily available solutions and financing at scale for timely, safe, inclusive, and just transition, before solutions that are effective now will be less effective with increasing global warming.

The COP 28 UN Climate Change Conference also confirms lagging progress across all areas of climate action, from emission reduction, resiliency enhancement, to financial and technological supports to vulnerable countries. Moving forward, countries aim to accelerate progress across all areas by 2030, including transition away from fossil fuels, funding for loss and damage, strengthening global climate resilience through Global Goal on Adaptation (GGA), as well as linking climate efforts to biodiversity and nature conservation.

“The choices and actions implemented in this decade will have impacts now and for thousands of years.”

– IPCC AR6 Synthesis Report Climate Change 2023



Policies, actions, and finances for climate change adaptation is required to survive the impacts already manifesting, as well as for climate transition to limit the global boiling and climate change impacts from spiralling beyond the point of no return. In Thailand, significant milestones to address the climate crisis are observed, from Draft Climate Change Act indicating implementations of mandatory emission reporting, emission trading schemes, carbon tax and credits, and climate change fund; Thailand Taxonomy Phase 1; the Bank of Thailand policy on adherence to environmental factors into financial institutions' policies; among many ESG-related guidelines. The industries also observed impact of the Cross-Border Adjustment Mechanism (CBAM) among Thai exporters.

“In early 2025, countries must deliver new nationally determined contributions. Every single commitment – on finance, adaptation, and mitigation – must bring us in line with a 1.5 - degree world”  
– UN Climate Change Executive Secretary Simon Stiell

With pressure from all fronts, understanding climate risks and strengthening business capacity, agility, and resilience for both transition and adaptation needs become all-time vital, particularly for SMEs and companies at the very beginning of their climate journeys. This is also the opportunity to capture – with increasing ESG market demands and regulations favouring the green and responsible, walking the ESG talk is among the pathways to thrive in the low-carbon transition urgency.

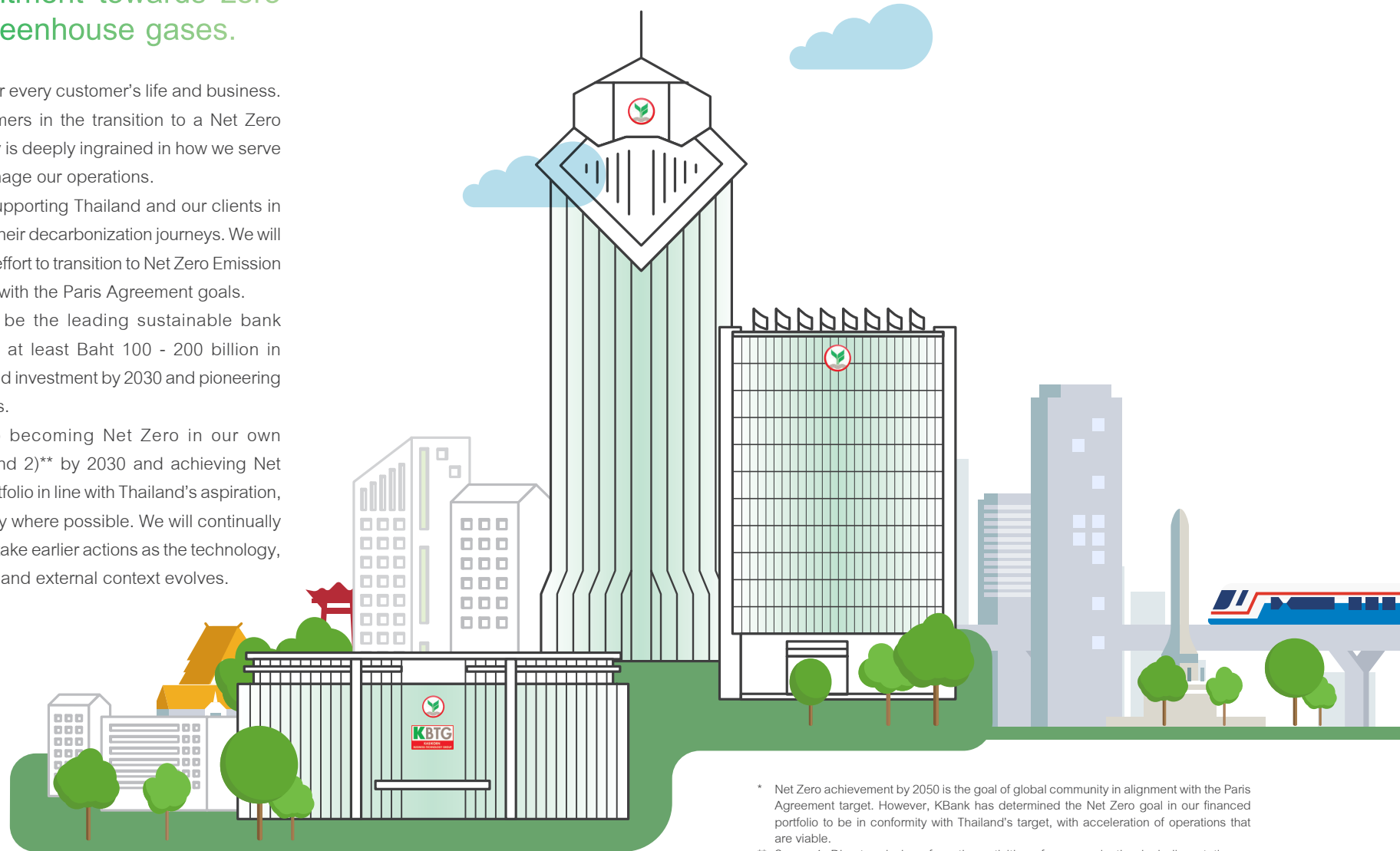
KBank recognized the significant role and duty of financial institutions in facilitating timely climate transition, and prepare to expand collaborations with our customers and stakeholders to mitigate risks, seize emerging climate opportunities, and develop Transition Plan to Net Zero along with our customers. With KBank ESG Aspiration of being an ESG Leader among Banks in Southeast Asia, KBank aim to ensure environmental stewardship towards a Net Zero-carbon society through dual key strategies of zero emissions with cost-efficiency in own operations and decarbonizing financed portfolio emissions. In addition, KBank also amplify impacts beyond our value chain by continuing cooperation with domestic and international agencies including represented the Thai Bankers' Association in joining the Thailand Taxonomy working group of the Bank of Thailand, Thailand Greenhouse Gas Management Organization (TGO), UN Thailand, Global Green Growth Institute, UNEP FI, UNGC, Partnership for Carbon Accounting Financials (PCAF), among other organizations to drive the sustainability agenda in Thailand and globally.

Stakeholders and interested audience can access KBank governance, strategies, risk management approaches as well as targets and metrics related to climate change as reported in this Task Force on Climate-related Financial Disclosures (TCFD) report.



## KBank's commitment towards zero emissions of greenhouse gases.

1. KBank aims to empower every customer's life and business. We support our customers in the transition to a Net Zero Economy. Sustainability is deeply ingrained in how we serve our customers and manage our operations.
2. We are committed to supporting Thailand and our clients in regional economies on their decarbonization journeys. We will contribute to the global effort to transition to Net Zero Emission by 2050\* and will align with the Paris Agreement goals.
3. We are committed to be the leading sustainable bank in Thailand, allocating at least Baht 100 - 200 billion in sustainable financing and investment by 2030 and pioneering green banking products.
4. We are committed to becoming Net Zero in our own operations (Scope 1 and 2)\*\* by 2030 and achieving Net Zero in our financed portfolio in line with Thailand's aspiration, accelerating this journey where possible. We will continually assess opportunities to take earlier actions as the technology, regulatory environment and external context evolves.



\* Net Zero achievement by 2050 is the goal of global community in alignment with the Paris Agreement target. However, KBank has determined the Net Zero goal in our financed portfolio to be in conformity with Thailand's target, with acceleration of operations that are viable.

\*\* Scope 1: Direct emissions from the activities of an organization including stationary combustion, fleet vehicles (organization-owned), chemical treatment of wastewater, as well as fugitive and process emissions. Scope 2: Energy-indirect emissions including an organization's purchased energy such as electricity, heat and steam.



KBank has prepared a report to comply with the Task Force on Climate-related Financial Disclosures (TCFD)\*, consisting of four aspects, as follows.

### Governance

Governance and management of risks and opportunities related to climate conditions

1. KBank Board of Directors
2. Risk Oversight Committee
3. Corporate Governance Committee
4. Credit Risk Management Sub-Committee
5. Sustainable Development Sub-Committee

### Strategy

Impacts of risks and opportunities related to climate conditions on business strategies and financial planning

1. Net Zero Strategy
2. Climate-related scenario analysis

### Risk Management

Processes for risk assessment and identification, and management of risks related to climate conditions

1. Analysis process of Climate-related risks and impacts, affecting KBank's operations and portfolios
2. Management of risks and impacts affecting KBank's operations

### Metrics and Targets

Metrics and targets for assessment and management of risks and opportunities related to climate conditions

1. Net Zero Emissions Target
  - 1.1 Net Zero Emissions from KBank's operations by 2030 (Scope 1 and 2)
  - 1.2 Net Zero Emissions in KBank's portfolio in line with Thailand's target
2. At least Baht 100 - 200 billion in sustainable financing and investment by 2030



\* More details can be viewed in Task Force on Climate-related Financial Disclosures (June 2017) and Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures (October 2021)



# Governance

## Governance

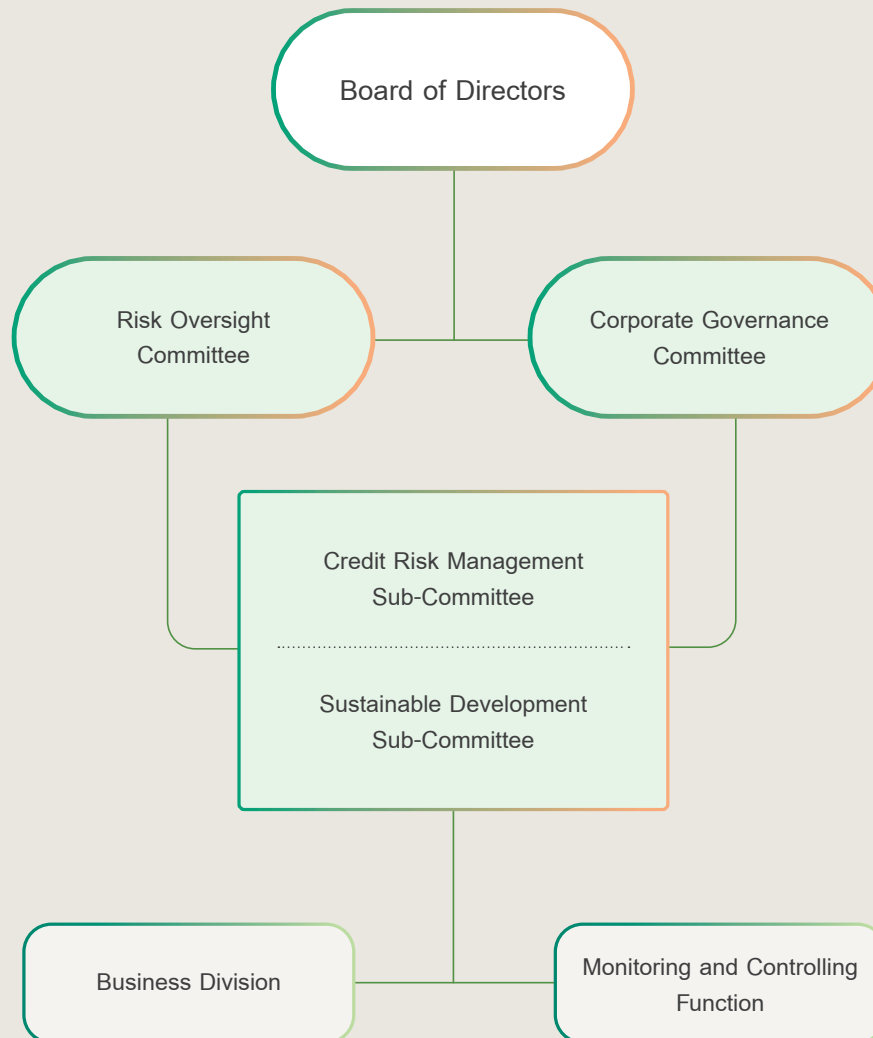
Describe the organization's governance around climate-related risks and opportunities.

## Governance Structure

Recommended disclosures

- a. Describe the organization's governance climate-related risks and opportunities.
- b. Describe management's role in assessing and managing climate-related risks and opportunities.

Governance Structure KBank's structure, policy and management related to climate change have been determined as part of the processes of sustainability operations that affirm our responsibility towards the environment, society, and governance, as shown below:



#### Board of Directors

- Approving risk management policy, framework, risk limit and risk appetites

#### Risk Oversight Committee

- Overseeing and ensuring compliance with consolidated risk management policies and strategies, and acceptable risk appetites
- Assessing risk management policies and strategies to cover all risks including emerging risks

#### Corporate Governance Committee

- Overseeing and undertaking sustainable development

#### Credit Risk Management Sub-Committee

- Determining ESG credit policy and processes, and updating such policy and processes

#### Sustainable Development Sub-Committee

- Considering and approving sustainable development frameworks and action plans
- Considering and approving policies, goals, strategies and targets related to sustainable development performance
- Overseeing and monitoring sustainable development operations
- Considering sustainable development communications within and outside KBank, and information disclosure in compliance with domestic and global sustainability frameworks and standards

#### Business Units

- Screening environmental and social risks of projects to be supported
- Ensuring and monitoring projects' compliance with environmental and social laws/agreements

#### Monitoring and Controlling Function

- Determining environmental and social management as agreed
- Reporting to the Corporate Governance Committee





The Board of Directors oversees KBank's overall operations, with independence in decision-making for the maximum benefit of KBank and stakeholders. The Board approves business strategies, goals, and policies of KASIKORNBANK FINANCIAL CONGLOMERATE, which incorporate sustainable development operations, and approves risk management policies and frameworks, and acceptable risk limits and scopes that include risks and opportunities related to the environmental, society and governance (ESG), as well as impacts of Climate-related risks. The Board approves annual business plans and budgets and supervises and monitors Management's operations in accordance with the established policies, strategies and business plans, related regulations, and the Sustainable Development Goals (SDGs) of the United Nations and Paris Agreement.

The Board of Directors has assigned to the Chief Executive Officer the role of Chief Environmental Officer, based on KBank's goal of being an environmental steward to create a Net Zero society, and setting targets of sustainability operations for the Chief Executive Officer, top management, and operating level to ensure that the goal will be achieved.

The Risk Oversight Committee is responsible for providing advice to the Board of Directors with respect to KASIKORNBANK FINANCIAL CONGLOMERATE's risk supervision framework, overseeing high-ranking executives and heads of risk management units to comply with risk management policies and strategies, and reviewing the adequacy of risk management policies and strategies to ensure that they encompass all types of risks and emerging risks, as well as ESG risks and Climate-related risks. The Risk Oversight Committee meets at least once a quarter and reports to the Board of Directors.

The Credit Risk Management Sub-Committee is responsible for determining KBank's credit management directions and strategies, and establishing and revising credit policies and processes, taking into consideration ESG risks and Climate-related risks, in order to specify portfolio management strategies, lending targets and frameworks in accordance with the business types with the aim of efficiently minimizing greenhouse gas emissions in KBank's portfolio (financed emission), in conformity with the responsible lending guidelines. The Credit Risk Management Sub-Committee holds meetings on a monthly basis.

The Sustainable Development Sub-Committee's duty is to drive KBank's operations in alignment with the sustainable development policy and to ensure the efficiency of such operations towards achievement of the established targets, based on the strategy of a "Bank of Sustainability". The Sustainable Development Sub-Committee is chaired by the Chief Executive Officer and holds at least one meeting each quarter.

### Business Unit

Risks and opportunities associated with climate change involve many business divisions. Thus, KBank has established a Climate Pillar Working Group, consisting of members from all divisions concerned so they can work together in driving the Bank to implement its climate commitment. Supervised and chaired by KBank President, the Working Group is responsible for designating strategies, targets, and action plans as concern climate change. It also monitors, supervises, and supports actions as targeted. In addition, the Internal Audit Department, which is an independent unit, has conducted audit based on risk-based assessment. The audit scope included significant risks and matters related to the Bank's environmental, social, and governance (ESG) topics and the significant audit result was reported to the Audit Committee.



# Strategy

## Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

## Management Strategies in Relation to Climate Change

Recommended disclosures

- Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.
- Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.
- Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2 °C or lower scenario.

KBank has announced the Net Zero Commitment with the aim of Net Zero in KBank's operations (Scope 1 & 2) by 2030. KBank is committed to achieving Net Zero in our financed portfolio in line with Thailand's aspirations, accelerating this journey where possible. To this end, KBank plans to revise our portfolio to conform to the Paris Agreement and Thailand's target by means of promoting the alleviation of greenhouse gas emissions and adaptation to climate change. KBank has established policy on fossil fuel and related sectors, and also sectors with significant environmental and social impacts.\* Additionally, KBank has added risks and opportunities arising from climate change as part of the risk management processes, including risk identification, risk assessment, risk monitoring and control, and risk reporting.

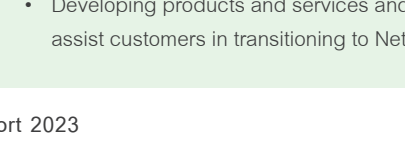
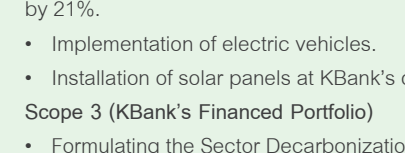
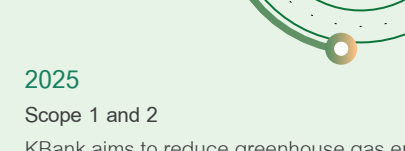
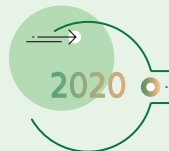
\* Remark: More details of the policy can be found on KBank's website: <https://www.kasikornbank.com/EN/IR/CorporateGovernance/transparency/Pages/esg-credit-policy.aspx>



# Towards Net Zero Emissions

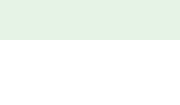
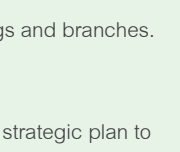
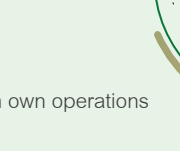
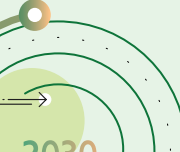
**Decarbonization Pathway to Net Zero**

- 2020**  
Base year
- KBank's Operations (Scope 1 and 2)
  - KBank's Financed Portfolio (Scope 3)



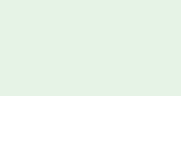
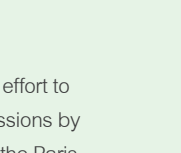
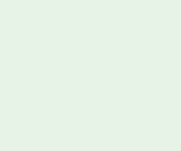
- 2025**  
Scope 1 and 2  
KBank aims to reduce greenhouse gas emissions from own operations by 21%.
- Implementation of electric vehicles.
  - Installation of solar panels at KBank's office buildings and branches.
- Scope 3 (KBank's Financed Portfolio)**
- Formulating the Sector Decarbonization Strategy.
  - Developing products and services and preparing a strategic plan to assist customers in transitioning to Net Zero emissions

- 2030**  
Scope 1 and 2  
Net Zero emissions from KBank's operations\*
- Carbon removal for residual emissions
- Scope 3 (KBank's Financed Portfolio)**
- Allocation of at least Baht 100 - 200 billion in sustainable financing and investment
  - Reduction of lending for coal-fired power plants and coal to zero



- 2050**  
Contribution to the global effort to transition to Net Zero emissions by 2050\*\* and will align with the Paris Agreement goals

- 2065**  
Scope 3 (KBank's Financed Portfolio)  
Net Zero in KBank's financed portfolio in line with Thailand's aspirations\*\*\*, accelerating this journey where possible



\* More details on the operational plan for reduction of GHG emissions under Scope 1 and 2 can be found in the chapter of Environmental Management section.

\*\* Net Zero emissions by 2050 is the global effort to transition to Net Zero emissions aligning with the Paris Agreement goals. However, KBank commits to achieving Net Zero in our financed portfolio in line with Thailand's aspirations, accelerating this journey where possible.

\*\*\* Thailand's ambition at COP26: 2050 carbon neutrality and 2065 Net Zero GHG emissions



## Strategy of Own Operation Decarbonization Pathway

KBank is ready to steer its business in a sustainable manner and create a balance between business growth and being environmentally responsible. For these reasons, the Bank has implemented an environmental management strategy by setting a target to become Net Zero in our own operations (Scope 1 and 2) by 2030. Concurrently, the Bank will continue to enhance its eco-efficiency through effective waste management. The Bank's employees will be encouraged to engage in related activities, including value-based resource management, such as the reduction in using natural resources, raw water for operations and the number of their business trips and process development, such as green procurement and green design for products and services which greater concerning about environmental impacts. The Bank is set to accelerate the implementation of various strategies to achieve the Net Zero target by reducing environmental impacts from our own operations as much as possible.



#### Scope 1: Emission from fossil fuel burned from KBank own car fleet

- EV Fleet Conversation
- Adopt lower emission factor fuel (E85, E20)



#### Scope 2: Emission incurred from electricity consumption

- Solar rooftop installation
- Energy Conservation Measure (Building Retrofit, BMIS)
- Space Optimization
- Renewable Energy Certificates (REC)



#### Residual Emission

- Carbon Removal from Carbon sequestration and Forestation Project



## Environmental Management System

The Bank has a systematic management in place to maintain its environmental responsibility, comprising efficient resource and environmental management, which is undertaken concurrently with our organizational development via planning and monitoring processes, with the aim of improving business operations and reducing environmental impacts in an efficient manner. The Bank has steadily improved our risk management in line with international standards and begun to adopt the ISO 14001, which sets out the criteria for an environmental management system, as follows:

### Management Approach

To become a zero-carbon organization in accordance with our environmental management strategy, KBank has adopted the focused acceleration approach in our energy and resource management, with the aim of bolstering our management efficiency in areas that have critical impacts on the environment and be under controls of KBank which enabling us to constantly create positive impacts on the environment. Such approach is based on simple concepts: “Waste reduction, maximum utilization of resources and restoration of natural resources”, which are seen in every scope of KBank’s services, including the management process, ranging from process design to product delivery, customer service, selection of environmentally friendly materials and equipment and zero-waste to landfill. KBank has implemented environmentally friendly operations, as follows:

### 1. Green Mobility

KBank recognizes the importance of reducing the impacts of internal combustion engines (ICE) on the environment, both GHG and PM2.5. In 2022, KBank began replacing our ICE vehicles with electric vehicles (EVs), with the aim of having our entire EV fleet by 2030.

Additionally, KBank attaches significance to value-based resource consumption, particularly the utilization of the company’s fleet. With this in mind, KBank has upgraded our vehicle tracking system so that we can analyze and monitor the use of the company’s fleet at both our Head Office and branches nationwide. This is to ensure that KBank derives maximum benefit from such operation, as reflected in the reduction of the number of our fleet vehicles to 124 units since first operating in 2021.

### 2. Green Building Design

KBank attaches importance to green building design, including construction and selection of environmentally friendly materials in accordance with the Leadership in Energy and Environmental Design (LEED) international standard, which is a certification of green buildings that takes into account environmental impacts, energy efficiency, and quality of life of occupants. In addition, our buildings are in line with the principles of universal design as they are equipped with facilities for the disabled and elderly.

Presently, the Bank has five LEED certified buildings, as follows:

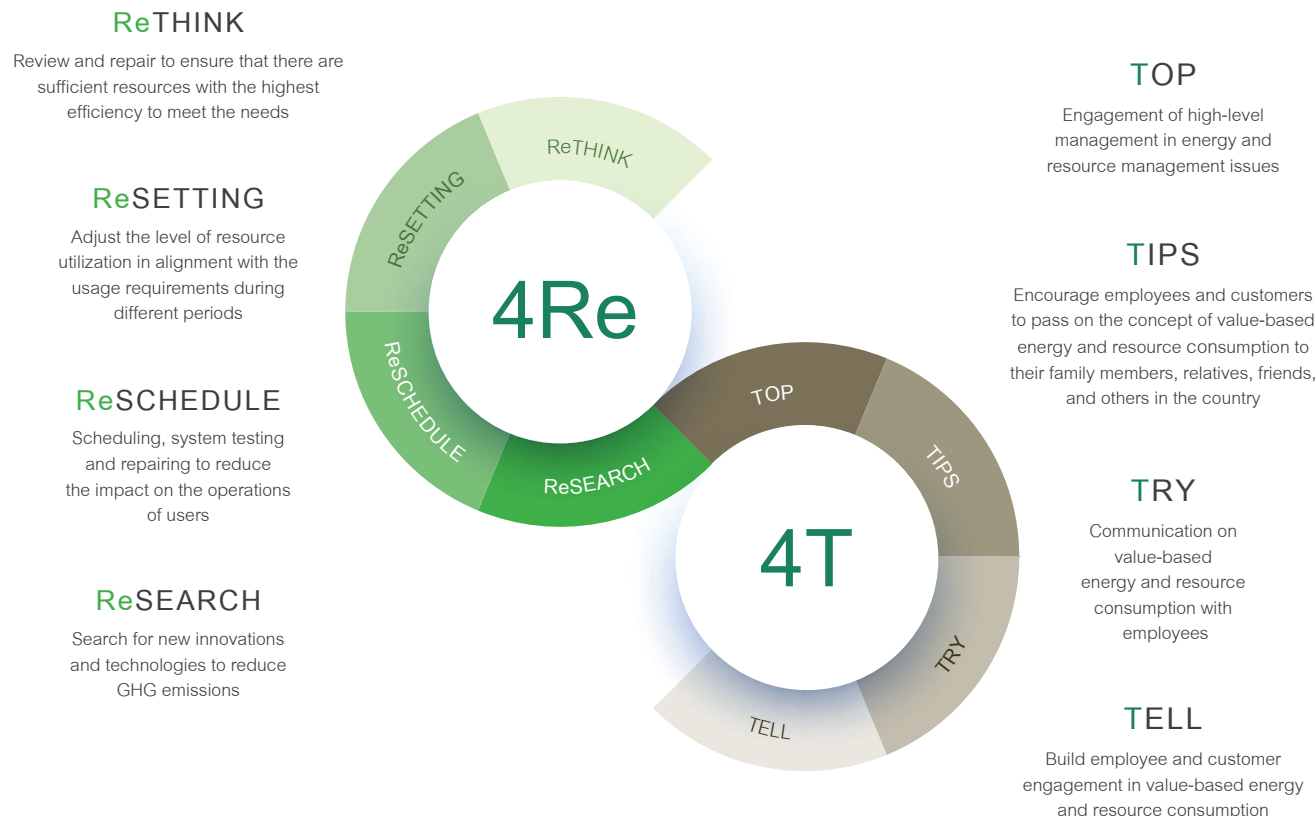
- KLOUD by KBank has been awarded LEED for New Construction v4.1 Gold Certification in 2023.
- KASIKORN BUSINESS-TECHNOLOGY GROUP Building (Pak Kret) has been awarded LEED for New Construction v3 (2009) Platinum Certification in 2016.
- Chaeng Watthana Building has been awarded LEED for New Construction v2.2 Gold Certification in 2016.
- KASIKORNTHAI Learning Center (Ban Pho) has been awarded LEED for New Construction v3 (2009) Platinum Certification in 2013.
- Phahon Yothin Building has been awarded LEED Commercial Interiors v2.0 Gold Certification in 2011.



### 3. Green Operations

KBank has established the 4Re to 4T concept as a guideline for effective resource management. This covers organization-wide management of the lighting system, air conditioning and water systems, as well as employee business travel, based on the 4Re concept to enhance the efficiency of technical management and 4T concept to promote recognition among employees and customers about value-based energy consumption via various communication and learning channels.

The Bank has steadily undertaken operations per the 4Re to 4T concept, as follows:



#### 3.1 Lighting System Management

A standard has been established by the Bank to use LED light bulbs in new buildings since 2016. Standard light bulbs have regularly been replaced by LED light bulbs. Our main buildings now use only LED light bulbs. Ongoing work is underway to replace all broken or expired standard light bulbs with LED light bulbs at our branches.

#### 3.2 Clean Energy Management

KBank has installed a solar rooftop system at seven buildings and offices, as well as at seven buildings of pilot branches. In 2023, the solar rooftop system generated 2,076.36 megawatt-hours of electricity. Therefore, KBank was able to reduce total GHG emissions by 1,037.97 metric tons of carbon dioxide equivalent. In 2023, additional solar rooftop system installations were ongoing, and the Bank estimated that installations at 78 branches will be completed by early 2024, with an addition of 200 branches by 2026. As a result, the Bank's share of renewable energy consumption will increase to 12 percent in 2026.

#### 3.3 Air Conditioning System Management

KBank has installed a chiller plant, equipped with an air handling unit (AHU), at four buildings, helping enhance the Bank's energy management efficiency. Additionally, KBank is in the process of development new technologies to regulate indoor air conditioning within buildings and branches to maintain health and safety of employees, mitigate the impacts of refrigerant leakage, as well as exploring new technologies to improve efficiency of preventive maintenance and predictive maintenance, while reducing equipment repair and maintenance turnaround.



### 3.4 Water Use Management

KBank has achieved efficient water system management through water management innovations. Water flow rates of faucets and toilets in every building have been adjusted to reduce water consumption. Wastewater is effectively treated and reused in sanitary and plant watering systems. In 2022, 19,458 cubic meters of recycled water were used at KBank.

Amid the current concern about heightening water stress in certain areas of the country, the Bank has conducted water risk assessment on all of the Bank's buildings and prepared risk assessment reports to enhance water use efficiency in water stressed areas. In 2023, the risk assessment reports indicated risks as shown below. The number of provinces with high level of water stress has increased compared to 2022 by 29 provinces. In addition, the number of provinces to be closely monitored for water stress risk increased by 2022 by 11 provinces.

### 3.5 Effective Waste Management

To ensure efficient waste management, the Bank has established procedures for our waste management, including hazardous waste, to be used as guidelines throughout the organization along with integrating state-of-the-art techniques into our waste management. Moreover, KBank has encouraged employees to sort different types of waste and avoid the purchases of products containing environmentally hazardous materials. KBank also ensures that operational processes help reduce wastes, including unwanted materials, expand equipment lifetimes, repair and reuse certain equipment, and turn single-use packaging into biodegradable materials through an efficient waste segregation system. The Bank has made available waste segregation points and waste disposal methods in accordance with the type of waste. KBank has worked with document collection and destruction service providers to recycle scrap paper into pulp and paper. In 2023, a total of 1,751 tons of scrap paper were recycled, helping save 29,767 trees from being cut down.

### 3.6 Efficiency of Employees' Travel for Work

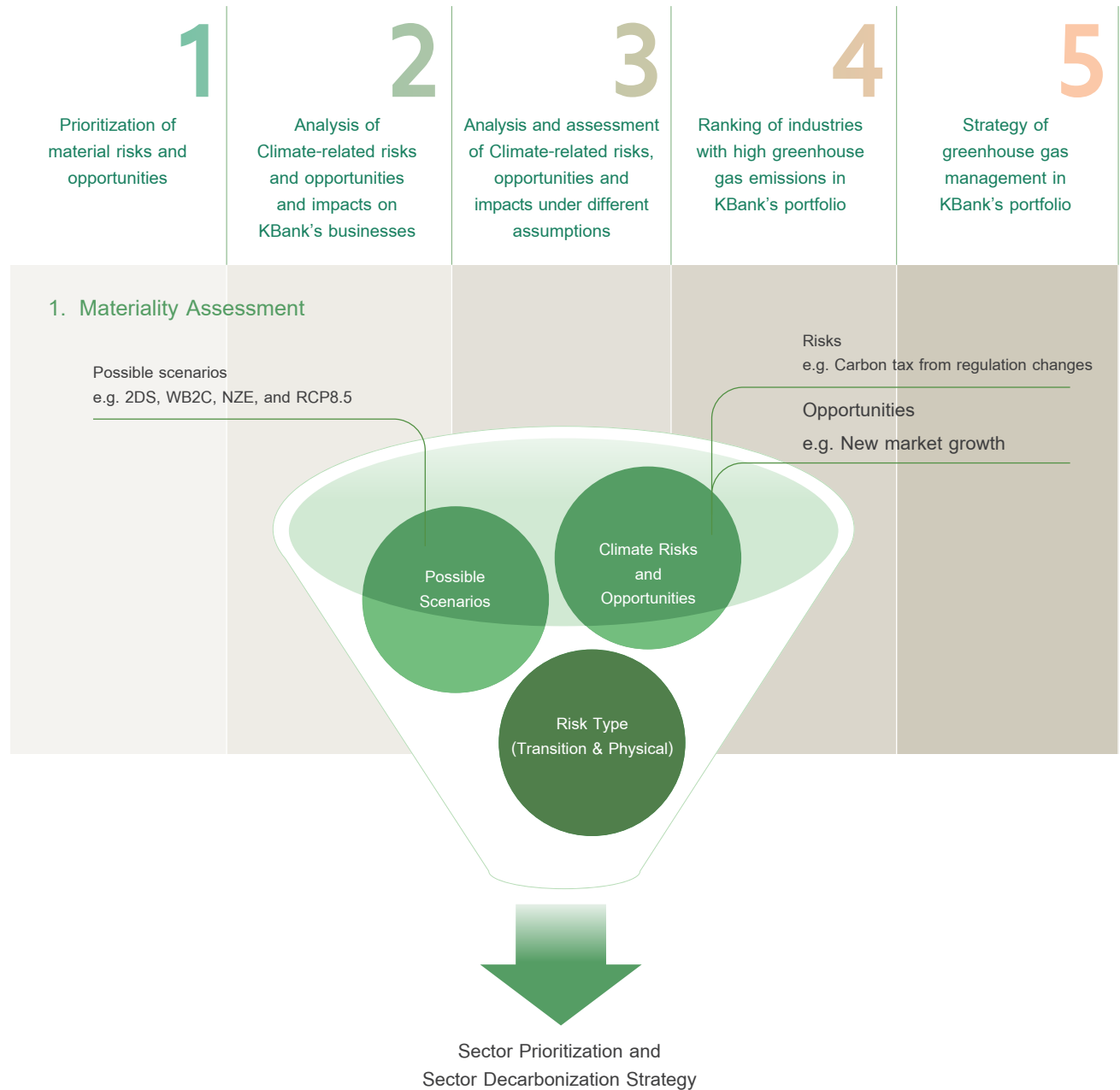
KBank has implemented the "Work that FITs" project to provide flexible working arrangements for employees. Under this project, employees can choose working patterns that suit the nature of their jobs and lifestyles, as well as selecting appropriate working hours. Aside from providing flexibility in logging work hours, such arrangements have been designed to reduce expenses for both employees and KBank while also contributing to environmental conservation by contributing to reduction in GHG emissions as well as PM2.5 pollution due to employee travel.

### 3.7 Green Process Design

KBank continuously promotes green process design by using technologies to improve its operational efficiency and offer customers greater convenience for using services. The green process design covers the digital on board process, which helps reduce operational procedures, and transaction fulfillment, at branches and offices throughout the country. In 2023, paper consumption reduction reached 25 million sheets, equivalent to 9,300 trees being saved. KBank has provision of its cheque service, resulting in the most satisfying service experience for customers. The effort also helped reduce the number of motorcycles for delivering cheques between branches and the cheque processing center by 105 vehicles, representing a reduction of about 3.6 million kilometers per year.



# Preparation Processes for Climate-related Risks and Opportunities







## 1. Materiality Assessment

KBank undertook qualitative analysis of Climate-related risks and opportunities that produce financial impacts on banking business, via consultations with internal units on possible scenarios, driving factors, related assumptions, possible impacts on KBank's businesses and results of each scenario towards our customers and the business sector. Consideration was made on the context of climate change through materiality assessment in order to prioritize material risks and opportunities, taking into account other countries' targets and Thailand's goals on the international forum, as well as Thailand's plan to reduce greenhouse gas emissions under the Nationally Determined Contributions (NDCs) within different timeframes until 2050 and different situations.

## 2. Analysis of Climate-related Risks and Opportunities and Financial Impacts on Banking Business

### 2.1 Climate-related Risks and Financial Impacts

These risks affect profitability, competition, image, reputation and survival. Without timely self-adaptation, businesses may face rising costs in the future as increased investment funds will be required for development for environmentally friendly products and services, thus affecting business operators' competitiveness and repayment capabilities, which will eventually have short- and long-term impacts on banks.

Short-term Risks: KBank may be affected by risks related to laws and policies, as a number of countries have enforced more operational guidelines and regulations, e.g., carbon taxes on the EU's imports under the Carbon Border Adjustment Mechanism (CBAM), which took effect in 2023, and other new measures to be launched by many countries.

Long-term Risks: KBank may be faced with impacts from rising sea levels that will create tangible effects in more than 10 years. Consequently, KBank has determined appropriate timeframes for such impact analyses.

### Timeframes for Risk Impact Analyses



Short Term

Within 5 years

Medium Term

5 - 10 years

Long Term

More than 10 years



KBank has wrapped up the results of analyses of Climate-related risks that could produce financial impacts on KBank and the guidelines for risk control and response, as follows:

	Risks	Definitions of Risks	Impacts on KBank Businesses	Timeframes of Risks	Risk Control Guidelines
Transition Risks	Risk related to Legal and Policy Aspect	Non-compliance with laws or legal stipulations	<ul style="list-style-type: none"> <li>Rising business costs of KBank</li> <li>Write-off and depreciation of assets, due to customers' inability to adapt to regulatory changes</li> </ul>	Short term - long term	<ul style="list-style-type: none"> <li>Monitoring to ensure strict compliance with related laws and regulations</li> </ul>
		More stringent trend of laws and regulations related to the environment, e.g., carbon tax, emission trading system (ETS), environmental measures causing trade barriers		Short term - long term	<ul style="list-style-type: none"> <li>Identifying and assessing regulatory impacts felt by sector as the first ground in KBank's portfolio</li> <li>Discussing with customers to seek self-adjustment guidelines</li> </ul>
	Risk related to Technology Aspect	Possibilities of and budgets for technology development investment in transition to low greenhouse gas emissions, e.g., production technologies using renewable energy sources, energy storage technologies, energy efficiency enhancement technologies, technologies to alleviate greenhouse gas emissions	<ul style="list-style-type: none"> <li>Write-off and depreciation of assets</li> <li>Technology changes leading to increased investment costs</li> <li>Falling demand for goods with high greenhouse gas emissions, adversely affecting customers' income and repayment capabilities</li> <li>Rising funds for research and development</li> </ul>	Medium term - long term	<ul style="list-style-type: none"> <li>Keeping abreast of progresses in technology innovation and development</li> <li>Supporting research and development of related units</li> <li>Planning for investment in new technology businesses</li> </ul>
	Risk related to Market Aspect	Changing consumer behaviors resulting in changes in demand and supply, consumers considering environmental and global warming issues as another factor in their buying decisions, making changes to market conditions	<ul style="list-style-type: none"> <li>Consumers are more interested in environmentally friendly products, affecting sales of goods that cannot keep up with such trends, leading to financial problems and deteriorating repayment capabilities of this customer group</li> <li>Write-off and depreciation of assets</li> </ul>	Short term - long term	<ul style="list-style-type: none"> <li>Designing and developing financial products and services that are environmentally friendly or create positive impacts</li> </ul>



	Risks	Definitions of Risks	Impacts on KBank Businesses	Timeframes of Risks	Risk Control Guidelines
Transition Risks (Continued)	Reputation Risks	Lending to businesses that are not environmentally friendly, pressures from stakeholders, e.g., customers and investors	<ul style="list-style-type: none"> <li>Declining confidence of stakeholders</li> <li>Reduced customers' use of KBank services, affecting KBank revenues</li> </ul>	Short term - long term	<ul style="list-style-type: none"> <li>Determining credit policy, exclusion list and credit underwriting guidelines for specific industries, and sector strategy to control greenhouse gas volumes of industries with significantly high greenhouse gas emissions</li> <li>Determining growth targets for sustainable financing and investment</li> </ul>
Physical Risks	Acute Physical Risks	Droughts and floods that tend to occur more often and with increased severity	<ul style="list-style-type: none"> <li>Damages to assets of customers and banks</li> <li>Business interruptions</li> <li>Rising costs and expenditures for prevention of and recovery from impacts of natural disasters</li> </ul>	Short term - long term	<ul style="list-style-type: none"> <li>Reviewing and assessing risks arising from natural disasters, determining work plans to alleviate impacts and emergency plans</li> <li>Incorporating risk factor arising from natural disasters in determination of acceptable risk appetites</li> </ul>
	Chronic Physical Risks	Rising global temperatures, weather fluctuations, higher sea levels	<ul style="list-style-type: none"> <li>Increased investment in research and development</li> <li>Write-off and depreciation of assets</li> </ul>	Long term	<ul style="list-style-type: none"> <li>Assessing risk and mapping out long-term glidepaths to enhance capabilities to cope with such incidents, and to manage assets, service centers and impacts on customers</li> </ul>

For the transition risks, regulatory risks, such as national policy and strategy related to climate change, phasing down and phasing out coal-fired power plants represent pivotal mitigation measures to fulfill Thailand's Net Zero commitment by 2065, as outlined in the Long-Term Low Greenhouse Gas Emission Development Strategy (Revised Version: November 2022). Consequently, our coal-fired power plants portfolio, which is approximately Baht 4,000 million, could pose a potential credit risk when the phasing out policy begins. To mitigate the risk, KBank has committed to completely discharge our financing to coal projects by 2030. Specific relationship managers are assigned to engage with the customers to support their transition to zero carbon economy.

For the physical risks, with a focus on flooding as a priority, KBank has identified the locations of owned assets that are at risk of being flooded, which could result in operational losses and interruptions to business operations. This identification is based on historical flood data of Thailand and a forward-looking scenario. By analyzing the historical cost of recovery recorded by the operation team and the operational income loss, KBank can estimate the financial loss to our machines and branch locations, which amounts to Baht 32 million. To mitigate these financial implications, a flood mitigation action plan has been developed. The cost of this mitigation action is estimated based on the number of locations at risk and the cost of mitigation per asset.



## 2.2 Climate-related Opportunities and Financial Impacts

While the business sectors and many nations are aiming to achieve Net Zero and transitioning into a society of renewable energy and clean energy consumption, as well as the adoption of technologies to enhance energy efficiency and minimize greenhouse gas emissions, financial needs for achieving the Net Zero target have been on the rise. In this circumstance, KBank sees certain opportunities to assist all sectors in realizing this goal.

Opportunities	Definitions of Opportunities	Opportunities or Benefits for Bank Businesses	Guidelines to Respond to Opportunities
Resource Efficiency	Efficient consumption of energy and resources, e.g., water recycling, use of energy-saving devices, construction of environmentally friendly buildings	<ul style="list-style-type: none"> <li>Reduction of KBank's operating costs</li> <li>Increase of value of assets that are environmentally friendly</li> <li>Enhancement of employees' quality of life and livelihoods</li> <li>Reinforcement of positive image of KBank</li> <li>Opportunities to provide financial support for customers' adjustment of business processes</li> </ul>	<ul style="list-style-type: none"> <li>Identifying work plans for greater efficiency of energy and resource utilization</li> <li>Increasing participation with customers to push forward their determination of operational strategies and investment planning for greater efficiency of resource utilization in their operations and production processes</li> <li>Preparing projects to promote awareness within and outside the organization</li> </ul>
Energy Source	Use of technologies to produce environmentally friendly energy, cooperation with agencies engaged in climate management		<ul style="list-style-type: none"> <li>Setting targets to use cleaner energy</li> <li>Setting targets to provide financing for transition towards clean energy utilization</li> </ul>

Opportunities	Definitions of Opportunities	Opportunities or Benefits for Bank Businesses	Guidelines to Respond to Opportunities
Product/ Services	<ul style="list-style-type: none"> <li>Development of financial products and services to support environmentally friendly businesses</li> <li>Development of products that are beyond financial services to minimize impacts of climate change</li> </ul>	<ul style="list-style-type: none"> <li>Expansion of customer database, generation of income from financial products and services that support environmentally friendly businesses and new income from innovations that are beyond financial services, such as establishment of emission trading platform</li> <li>Increase of competitiveness</li> <li>Risk diversification for KBank's financial assets</li> </ul>	<ul style="list-style-type: none"> <li>Innovating and designing new products and services to offer diverse opportunities and choices to customers</li> </ul>
Markets	<ul style="list-style-type: none"> <li>Market expansion with financial support that is environmentally friendly</li> <li>Creation of new market with products and services that are beyond financial services</li> </ul>		<ul style="list-style-type: none"> <li>Setting targets of sustainable financing and investment</li> <li>Revising portfolio allocation to focus on environmentally friendly businesses and related businesses in the entire supply chain</li> </ul>
Resilience	Self-adjustment to climate change	<ul style="list-style-type: none"> <li>Increase of market value and KBank's reputation</li> </ul>	<ul style="list-style-type: none"> <li>Revising business strategies to focus on Climate-related management</li> <li>Analysing Climate-related risks and opportunities</li> <li>Setting up an operational structure, arranging for personnel potential development and establishing a data storage system in support of Climate-related management</li> </ul>



### 3. Climate-related Scenario Analysis

KBank has conducted the Climate-related scenario analysis, both qualitatively and quantitatively, in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), to assess impacts of climate change on KBank's portfolio and to apply the assessment results in establishing portfolio management strategies with respect to risk management and searching for business opportunities.

#### 3.1 Assessment of Transition Risks

KBank has employed Climate Financial Driver Analysis (CFDA) as a tool to analyze Climate-related risks and opportunities incurred from lending to businesses that might impact financial risks of KBank and our customers under diverse scenarios. Focus has been placed on risks arising from changes in regulatory policies and regulations, and changes in technologies and markets amid the transition towards a low carbon economy (transition risk). The analysis processes consist of the following.

#### 1. Processes of Assessment of Impacts from Transition Risk

##### 1.1 Identification of scenarios for analysis:

- 1) Well-below 2 Degrees Celsius Scenario (WB2C); using Sustainable Development Scenario (SDS) for ASEAN
- 2) Net Zero Scenario (NZE)
- 3) Business As Usual; using Stated Policies Scenario (STEPS)

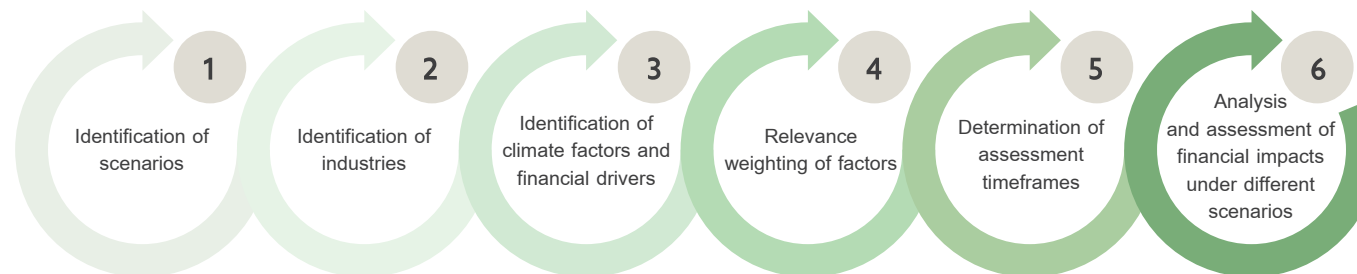
**1.2 Identification of industries:** KBank has selected three types of power plants in the power plant industry for analysis, including natural gas power plants, hydropower plants and biomass power plants.

**1.3 Identification of climate factors and financial drivers:** Climate factors and financial drivers have been identified for each type of power plant to study the relevance of impacts between these factors.

**1.4 Relevance weighting of factors:** to reflect the levels of relevance to financial figures, classified into low, medium and high levels.

**1.5 Determination of assessment timeframes:** including short term (2025), medium term (2030) and long term (2040 and 2050).

**1.6 Analysis and assessment of financial impacts under different scenarios:** via calculation of differences of factors under selected scenarios in comparison with the Business as Usual Scenario in each stipulated timeframe to come up with financial impacts on each type of power plant.





## 2. Results of Climate-related Financial Analysis

Net financial impacts under the Well-below 2 Degrees Celsius Scenario can be summarized, as follows:

- **Natural gas power plants:** indicating low risk in the short term that will escalate to high risk in the long term, based on an assumption that natural gas will serve as transition fuel in the short and medium terms, before replacement by other alternative fuels with less carbon emission and due to rising carbon prices in the long term; it is expected that revenues will fall following the decrease in demand for electricity generated by natural gas.
- **Hydropower plants:** indicating limited opportunities in the short term that will escalate to medium to high opportunities in the long term, based on a forecast of higher revenues following rising demand for electricity generated by low carbon sources in the medium and long terms.
- **Biomass power plants:** indicating limited opportunities in the short, medium and long terms; revenues risk would be in line with energy consumption that is expected to rise.

Under the Net Zero Scenario, net financial impacts on different types of power plants can be summarized in a similar manner. However, there will be some differences with respect to the levels of impacts.

The analysis results have been used in decision-making of KBank's credit portfolio management and financial planning. In addition, these analysis results will be incorporated in the processes of strategic planning and assistance for customers' Net Zero transition journey through the design of green financial products and services, for example, renewable energy loans.

In this regard, KBank will expand the scope of Climate-related Scenario Analysis to cover other industry groups in accordance with their priorities.

### 3.2 Assessment of Physical Risk Arising from Climate Change

Physical risk arising from climate change is classified into two types:

- 1) **Acute physical risk** is associated with sudden and severe phenomena, e.g., cyclones, typhoons, floods and droughts, which have become more often and severe.
- 2) **Chronic physical risk** is involved with accumulated and lengthy climate change, e.g., sea level increase, and changes in average global temperatures, air quality and rainfall.

These two risks will produce negative impacts on KBank in various aspects throughout our value chain e.g., damages to assets of suppliers, customers, and KBank, business disruptions, rising costs and expenditures for prevention of and recovery from impacts of natural disasters, increased investment in research and development, and write-off and depreciation of assets.

According to Germanwatch's Global Climate Risk Index of 2021, the top 10 countries have been ranked with the highest risk of extreme climate conditions as a result of climate change, among which Thailand is in the ninth position. The criteria for such rankings included five factors, namely the fatalities, fatalities per 100,000 inhabitants, the losses in million USD Purchasing Power Parities (PPP), the losses per unit GDP in percentage, and the number of events over the period of 2000 - 2019. For Thailand, there were 146 natural disasters (in 20 years), and the total value of losses amounted to USD 7,719.15 million.

**Physical risk: Existing exposures and increasing flood risks in extreme weather conditions.**

Our physical risk assessment covered KBank's own operations, upstream and downstream activities.

KBank identified the flood risk level faced by our operations in Thailand for commercial banking and retail banking including secured loans and mortgage financing in Thailand. KBank applied an inventory of exposure for high flood risk level according to the "Repetitive flooding map of Thailand" developed Office of Natural Calamity and Agricultural Risk Prevention, Land Use Policy and Planning Division, Land Development Department, Ministry of Agriculture and Cooperatives.

Level of Risk	Number of flood events in the past 10 years
No risk	0
Low risk	1 to 3
Medium risk	4 to 7
High risk	8 to 10

To assess forward-looking flood risk under RCP2.6 and RCP8.5, the scenario data of flood risk indicators (Relative changes in **Annual Maximum River Flood Depth** and/or Relative changes in **Land fraction annually exposed to River Floods**) from the Climate Impact Explorer developed by Climate Analytics is applied to evaluate rising flood risk by 2050. The geographical location of KBank's operating assets and collateralized assets was combined with the Repetitive flooding map of Thailand and Climate Impact Explorer's flood risk indicators via the geographical information system analysis to achieve precise and granular evaluation of the existing and forward-looking flood risk.



KBank has considered methodologies to assess financial impacts caused by physical risk, based on changes in key credit variables, as follows:

### 1. Factors to Assess Financial Impacts caused by Physical Risk

KBank has assessed financial impacts caused by physical risk, based on changes in key credit variables, as follows:

#### 1) Probability of Default (PD)

KBank's assessment is expected to estimate changes in income effect, based on the depreciation of financial positions of the counterparties. The level of depreciation may vary in accordance with the types of industries and the counterparties' locations. The income effect will be incorporated in the PD that varies with the value of risk arising from flooding.

#### 2) Loss Given Default (LGD)

KBank is expected to estimate changes in customers' wealth via depreciation of collateral value. The levels of depreciation represent decreasing wealth, which will depend on the locations of collateral, statistics and trends of flooding in such particular areas. The value of losses may vary with the value of risks arising from flooding.

Changes in these parameters may result in changes in credit risks, revealing potential financial impacts and magnitude of physical risks associated with KBank's assets. The findings of the analysis can be translated to develop mitigation plans and inform business strategies of new and current operations and lending such that KBank can manage these risks within controllable and acceptable limits.

### 2. Results of Assessment of Financial Impacts caused by Physical Risk

Based on an evaluation of collateral portfolio in the part of properties, along with consideration of the GIS data, KBank is estimated to have a low proportion of collateral located in areas of high flooding risk. Taking into account the flooding risk factors in accordance with the flooded areas over the past 10 years, the high flooding risk factor would not produce any significant impacts on customers' wealth. However, the value and depreciation value of collateral and customers' wealth may vary according to other factors, such as land prices, population, economic activities and risks associated with natural disasters. Such other factors have not been considered co-factors for impact assessment of the aforementioned flooding risk.

A review of KBank's high physical exposure to flood by the end of December 2022 is as the following:

Risk factor		Historical data	Future projection 2050 RCP2.6	Future projection 2050 RCP8.5
Proportion of No. of asset in High risk - flooding	Owned assets	0.01%	0.38%	0.49%
	Collateral assets	0.12%	0.54%	0.57%
Data resource		Office of Natural Calamity and Agricultural Risk Prevention*	Climate Impact Explorer by Climate Analytics in collaboration with the NGFS, the Potsdam Institute for Climate Impact Research and ETH Zürich**	

Source:

\* Classification of risk levels by the Land Use Policy and Planning Division, Land Development Department, <http://lrw101.ldd.go.th/index.php/2017-05-23-02-00-40/2017-05-23-02-00-40>

\*\* <https://climate-impact-explorer.climateanalytics.org/>



There are various challenges in the assessment of financial impacts caused by physical risk, for example, geographical diversity of collateral and collateral values that are influenced by different factors. Therefore, creation of models of losses caused by flooding and detailed projection of flooding maps in the medium and long terms is complicated and varied by each particular area.

Going forward, KBank plans to assess financial impacts based on physical risk, as follows:

- 1) Development of tools to analyze physical risk under cooperation with government agencies, research institutes, academics and outside experts to determine a risk area map that is specific for use in Thailand.
- 2) Expansion of assessment of impacts on wealth and income caused by flooding risk that produces repercussions on credit risk – The assessment results will be incorporated into the credit risk management processes. Such impact assessment includes, for example, analysis of risks, opportunities and impacts related to weather conditions under different assumptions (Climate-related Scenario Analysis), with respect to physical risk and stress testing.
- 3) Participation with outside experts and advisors to study different adaptation scenarios of the Network for Greening the Financial System (NGFS) and forecast of impacts in order to calculate the volumes of impacts caused by physical risk under diverse weather situations, and to study the methods of risk assessment for physical risk per the World Bank's recommendations.

#### 4. Sector Prioritization for Industries of High Greenhouse Gas Emissions in the Portfolio

KBank has classified the industrial groups of high greenhouse gas emissions in the portfolio in order to determine the Sector Decarbonization Strategy and the paths to alleviate and control the volumes of greenhouse gas emissions of each industrial group in accordance with the Paris Agreement and Thailand's target.

Most recently, KBank has prepared strategic plans to alleviate greenhouse gas emissions of five industrial groups of high emissions, namely power generation, coal mining, oil and gas, cement, and aluminum.



#### 5. Strategy to Manage Greenhouse Gas in KBank's Portfolio

KBank has gradually determined strategies to reduce greenhouse gas for each industry in the portfolio, as follows:

- Power generation: KBank will not extend new loans to new coal-fired power plants and will gradually reduce the outstanding loans of coal-fired power plants to zero within 2030.
- Coal mining: KBank will not provide support for thermal coal mining or construction of related infrastructure, and plans to gradually reduce the outstanding loans of thermal coal mining to zero within 2030.
- Oil and gas: KBank has a policy to control loans, investments and contingent liabilities in upstream oil and gas financing, including exploration, drilling and production, within the relevant pathway to reduce greenhouse gas emissions. KBank also does not support any exploration, drilling or production projects of unconventional resources, for example, tar sands, shale oil and gas, and Arctic oil and gas.





- Cement production: KBank has mapped out a strategic plan for greenhouse gas reduction among cement producer group, by controlling the greenhouse gas intensity per unit of cement plants, in parallel with routes and targets for greenhouse gas reduction.
- Aluminum industry: KBank has mapped out a strategic plan for greenhouse gas reduction among aluminum producers (secondary production), by monitoring the greenhouse gas intensity per unit of aluminum plants. KBank will consider start controlling the greenhouse gas intensity per unit, in parallel with routes and targets for greenhouse gas reduction, when the global leading banks start controlling greenhouse gas emission among secondary aluminum production, or when EU countries start to consider collecting carbon tax from secondary aluminum production.

KBank also provides support for increases in generation and utilization of renewable energy, enhancement of energy efficiency, investment in carbon capture and storage technology and low-carbon energy transformation. We are now planning to gradually expand our scope of greenhouse gas management to other industries to increase the share in our portfolio on a continual basis.

In addition, KBank has undertaken numerous significant operations of sustainable development based on the guidelines and strategies established by the Board of Directors.

KBank has already begun our monitoring of our Net Zero Commitment to reduce greenhouse gas emissions in our own operations, notable operations related to minimization of greenhouse gas emissions in our financed portfolio in 2023 include the following:

- Preparation of additional Sector Decarbonization Strategy for two more industries, i.e. cement and aluminum
- Preparation of a customer engagement plan to ensure that they have also followed the commitment to participate in our journey towards Net Zero emissions, with the initial focus on significant industrial groups
- Support for sustainable financing and investment to push forward and promote transition to achieve the Net Zero goal
- Development of staff knowledge and capabilities for KBank and our customers via diverse tools, including training and seminars, ESG Consult Clinic and online training courses

## 5.1 Sector Decarbonization Approach

KBank has adopted several globally-recognized climate target setting and decarbonization standards such as UNEP FI Climate Target Setting Guidelines, SBTi, and PACTA to inform the development of our sector-specific decarbonization strategies. The combination of multiple standardized targets setting principles gives KBank options to choose the appropriate decarbonization strategies and target settings, varying by unique characteristics of each industry.

## 5.2 Decarbonization Scenarios

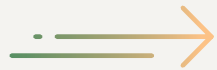
There are several climate scenarios that represent paths to Paris Agreement, including the Net Zero Scenario (NZE) and the Sustainable Development Scenario (SDS). The Science-based Target Initiative (SBTi) suggests financial institutions set decarbonization targets of their financed emissions based regional pathways instead of global pathways. The choice between global pathways and regional pathways ultimately depends on the geographical composition of portfolio, availability of data, sector-specific characteristics, and country-specific characteristics of these prioritized sectors.

Thailand has placed high priority on climate change as one of the key challenges affecting communities' livelihood, economic growth, and the achievement of sustainable development. The Thai government has publicly committed to carbon neutral target by 2050 and Net Zero carbon by 2065 referenced to the 26<sup>th</sup> Conference of the Parties (COP26). To attain carbon neutrality and Net Zero goals, Thailand has revised and published its 2<sup>nd</sup> updated Nationally Determined Contribution (NDC) the national Long-Term Low Greenhouse Gas Emission Development Strategy (LT-LEDS) on November 2022 to accelerate the decarbonization pathways, aligning the national goals with the goals of the Paris Climate Agreement of keeping the global warming well-below 2 °C.

Therefore, KBank has applied the IEA Sustainable Development Scenario (SDS) as the reference decarbonization pathways of our portfolio, aligning our investment pathways with the goal of the Paris Agreement of keeping the global warming well-below 2 °C. Nonetheless, KBank will consider and incorporate any material changes to Thailand's GHG reduction pathways strategies as they arise into KBank's decarbonization pathway.



## Climate Transition Engagement

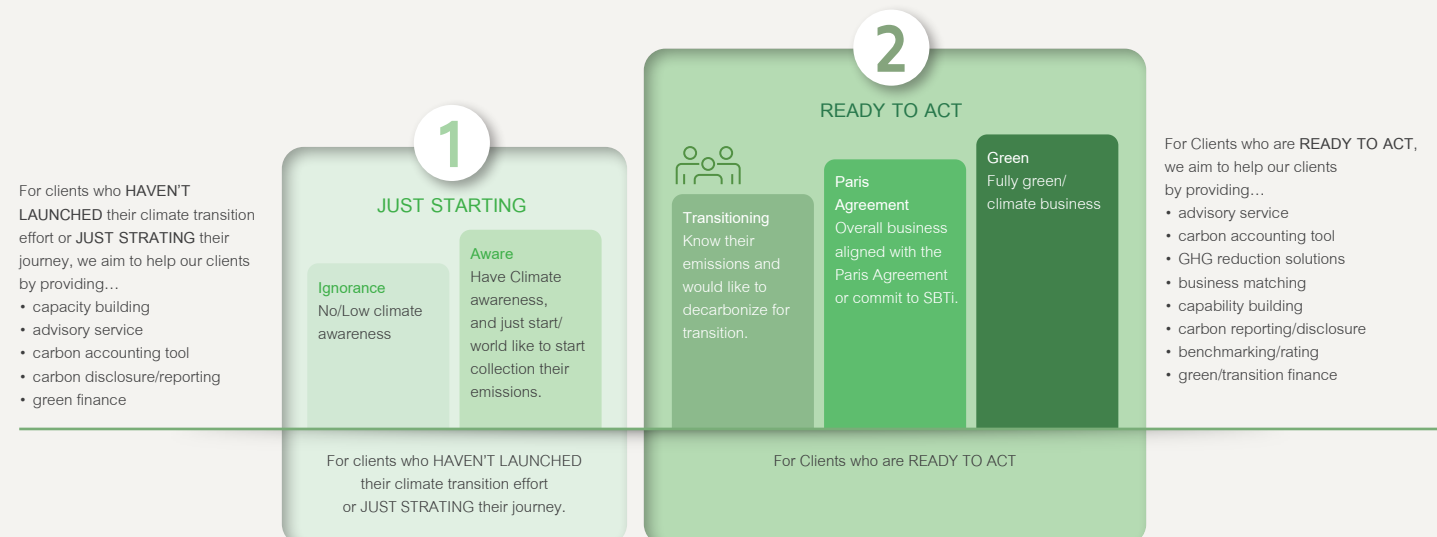


In our client engagement, we have conducted an analysis of existing financed emissions of client's scope 1, 2, 3 in each sector to understand where the hotspots are and assess how we can best support them in their transition journey. We have also categorized our clients based on their climate readiness, for customer's demand, regulatory pressure, availability of technology, etc., to prioritize and develop most suitable decarbonization solutions for each industry. This is to ensure that capital flows to the best performing clients, even those in traditionally carbon intensive sectors and SME with strong ambition for low-carbon transition.

Our clients can be categorized into 2 major groups:

- **JUST STARTING:** clients who are about to initiate, or have recently begun laying down the foundations of climate transition efforts. KBank aim to provide supports including knowledge sharing, advisory services, and readiness preparation to facilitate clients in capacity building and conducting climate-related activities such as data collection, report preparation and disclosures. KBank also aim to provide financial support through green finance instruments.

- **READY TO ACT:** clients who have already been conducting climate-related activities towards climate-related targets. Within this group, client climate maturity may range from Transitioning (would like to decarbonize for transition); Paris Agreement (overall business is already aligned with Paris Agreement, or have already set Science-Based Targets); or Green (fully green businesses, or businesses directly contributing to climate change mitigation and/or adaptation). For this group, KBank aim to support clients' climate ambitions through the Bank's products and services ranging from green/transition finance, green bonds, sustainability-linked loans (SLL), as well as climate and financial advisory services by specialists in order to help drive clients' success in achieving climate-related targets and contributing to solving the climate crisis.





# Risk Management



## Risk Management

Describe how the organization identifies, assesses, and manages climate-related risks.

## Risk Management

Recommended disclosures

- a. Describe the organization's processes for identifying and assessing climate-related risks.
- b. Describe the organization's processes for managing climate-related risks.
- c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

KBank has designed the processes of appropriate risk consideration to prevent and minimize business risks of customers and KBank. For the overall risks of the organization, consideration is made on transition risk and physical risk that will directly affect KBank's major risks, for example, credit risk and operational risk.





## Three Lines of Defenses

KBank has applied the Three Lines of Defense guidelines to our risk management, starting from the Board of Directors to the operational level to ensure that our risk management process has been efficiently supervised, controlled, and examined by responsible units.

**1<sup>st</sup> Line - Business units** are responsible for continuous and active management of all relevant risk exposure to be in line with its returns and risk appetite.

**2<sup>nd</sup> Line - Risk management and control units** are responsible for providing independent and objective views on specific risk-bearing activities to safeguard the integrity of the entire risk process, as well as controlling risk levels to ensure that they are in line with our risk appetite.

**3<sup>rd</sup> Line - Internal Audit** is independent and responsible for evaluation to add value and improve the effectiveness of risk management.

## Risk Management Process

KBank has in place a risk management process comprising risk identification, assessment, monitoring, controlling and reporting. We have steadily improved our risk management process so that it is consistent with regulatory changes, emerging risks and the prevailing business environment. We have focused on climate-related risk, which has been incorporated into our credit risk management process. Climate-related risk is a factor for credit underwriting as well as assessing the impact on KBank's credit portfolio. KBank also places significance on early warning and monitoring of risk position and overall concentration. We have also regularly reviewed the adequacy of our risk management system and efficiency of risk management via relevant committees. The reviews have shown that our overall risk management is appropriate.

## Enterprise Climate-related Risk Consideration

KBank's processes to consider the overall climate-related risk of the organization include the identification, assessment and alleviation of impacts of climate conditions on KBank's covered scope of own operations, upstream and downstream activities, to ensure our business continuity and safety of the lives and property of our customers, employees and all stakeholders. Such risk consideration is a component of KBank's enterprise risk management, and is conducted on a yearly basis or more than one time a year to keep up with the prevailing trends and to be able to cope with newly emerging impacts of climate conditions in a timely manner. Risk consideration is associated with the respective timeframes of short, medium and long terms, incorporating newly emerging factors that affect global climate conditions.

## Enterprise Climate-related Risk Consideration



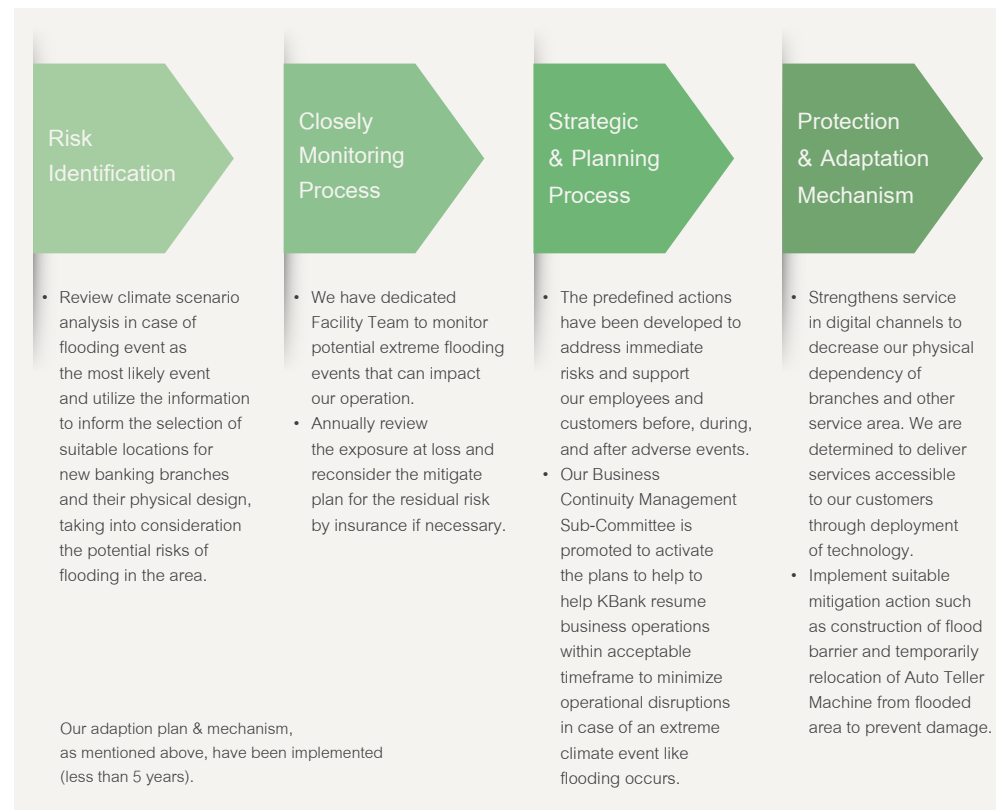
- Risk Identification:** Identifying Climate-related situations/ threats that incur physical risk and transition risk, based on global megatrends, and considering new rules and regulations
- Risk Assessment:** Assessing overall risk of the organization in three levels: high, medium and low, based on impacts and likelihood of risks, and effectiveness of existing controls
- Risk Mitigation:** KBank has proactive risk management in place, consisting of risk prevention, monitoring and management. For any high-level or significant risks, KBank will undertake additional analysis to prevent, correct or implement more management measures, for example, improvement of processes and review of resource allocation to control risks, taking into consideration various factors, e.g., risk incidents, costs, resources, and impacts on customers and business operations. KBank also has a Business Continuity Plan (BCP) and IT Disaster Recovery Plan (ITDRP) to deal with Climate-related risk incidents that may have impacts on our operations and business undertakings.



## Physical Climate Risk Adaptation Plan

Climate change can affect KBank facilities, operations, and employees. The scientific consensus is that climate changes due to a warming climate may occur in more frequent and severe acute weather like severe flooding. Thus, there are higher probability of negative financial impacts and business disruption events to our employees and the infrastructure – such as power and data centers – could be exposed to a range of risk depending on the location of each facility located.

KBank has implemented following climate physical adaptation solutions in protect our people, facility, and business from adverse physical climate risk.



## Consideration of Credit Risk Related to Climate Conditions

With the Portfolio Impact Analysis Tool of the United Nations Environment Programme Finance Initiative (UNEP FI), KBank's review and assessment of overall positive and negative impacts on business operations were made in the economic, social and environmental aspects. It was found that various issues must be managed without delay (Very High and High Country Need Score), including the following:

1. Environmental aspect: climate, biodiversity and circularity
2. Social aspect: equality & justice, integrity & security of person, and availability, accessibility, affordability & quality of resources and services
3. Economic aspect: strong Institutions, peace & stability and socio-economic convergence

Although KBank has placed importance on those three risk factors, a particular focus is on the environmental aspect, which is one of the world's most urgent issues, and could produce extensive and serious impacts. Concerning KBank's credit portfolio, the results of analysis are as follows:

1. Climate issues: KBank has placed an emphasis on the power generation industry, which is among the industries with high greenhouse gas emissions. Of multiple types of energy sources, namely, natural gas, water, coal, solar, wind and other technologies, coal is the energy source that releases the highest volume of greenhouse gas. Therefore, KBank has planned to minimize financial support to coal-fired power plants, while extending more credits to those using renewable energy or alternative energy, in a bid to reduce greenhouse gas emissions in line with Thailand's goal.
2. Resource and efficiency issues: Focus has been placed on the real estate sector to extend loans to projects that have been certified with the green building standards. In addition, KBank has provided credit supports for projects or activities aimed to enhance efficiency in energy consumption, and to develop products and production technologies to promote circular economy, environmental friendliness, and recycles in other industries.



# Metrics and Targets

## Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

## Metrics and Targets

Recommended disclosures

- Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.
- Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

KBank has established ESG Objectives and Key Results (OKRs) based on the Balanced Scorecard as a tool for transforming the strategy into practice. Key performance indicators have been drawn up to measure success through four key dimensions, including: Finance, Customers, Internal Processes, and Learning and Sustainable Development, to ensure that business strategies that account for environmental, social and governance factors are in harmony across the organization. The key performance indicators will be cascaded from the level of Chief Executive Officer to the level of President, Division Head, Employee and other parties involved. Operating results have been monitored to attain the established objectives.



Sustainable Development Policy – Environmental Aspect	Metrics and Long-term Targets 2023 - 2025	Target 2023	Performance 2023
<b>Net Zero in our own operations by 2030*</b>	1) 21% reduction of greenhouse gas emissions in 2025 (Baseline year: 2020) 2) Achievement of “Zero Waste to Landfill” at KBank’s main buildings within 2025	12.6% reduction of greenhouse gas emissions (Baseline year: 2020)	12.74% reduction of greenhouse gas emissions (Baseline year: 2020)
<b>Decarbonized financed portfolio emissions in line with Thailand’s ambition, and at the earliest for key material sectors by 2050 where possible</b>	Complete development of glidepaths and/or sector strategies	Development of 2 glidepaths and/or sector strategies	Development of glidepaths and/or sector strategies for 2 industries, including cement and aluminum industries
<b>Leader of innovative “Green Finance” agenda in Thailand</b>	At least Baht 100 - 200 billion in sustainable financing and investment by 2030	Baht 25,168 million allocated in sustainable financing and investment	Baht 46,986 million allocated in sustainable financing and investment

\* Net Zero in our own operations by 2030 includes

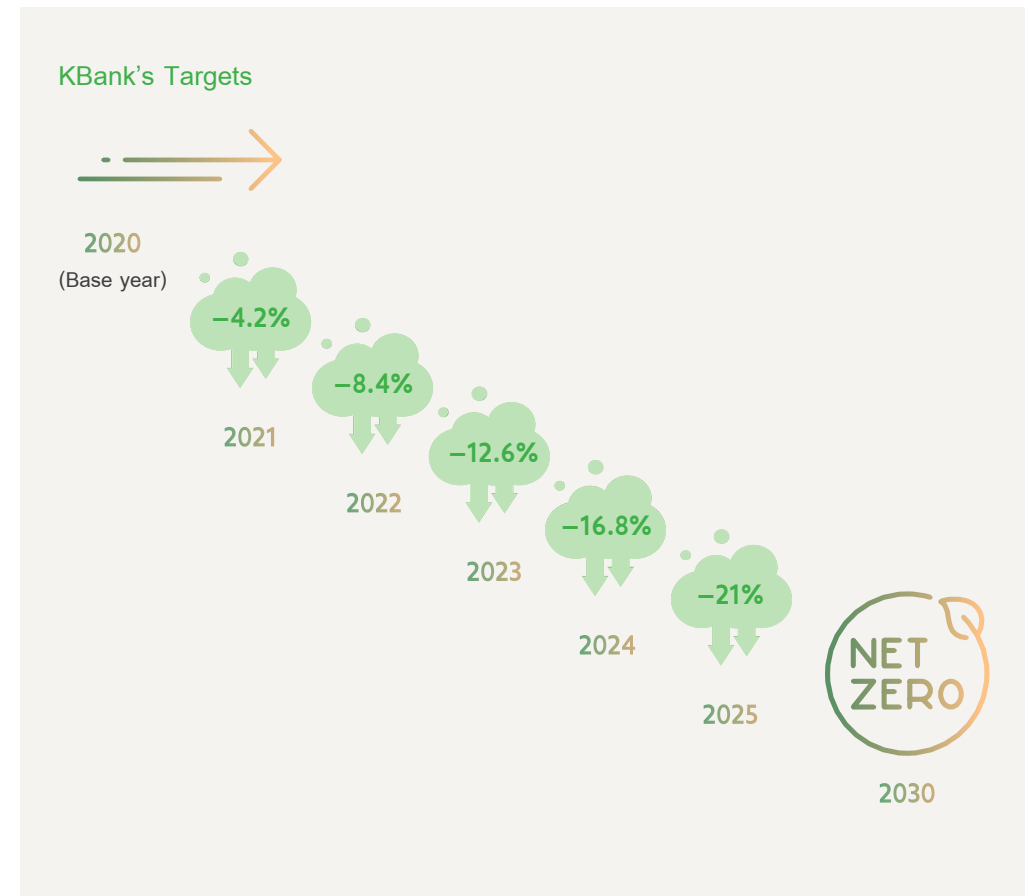
Scope 1: Direct emissions from the activities of an organization including stationary combustion, fleet vehicles, chemical treatment of wastewater, as well as fugitive and process emissions.

Scope 2: Energy-indirect emissions including an organization’s purchased energy such as electricity, heat and steam.

The key performance indicators will be cascaded from the Chief Executive Officer level down to the President, Division Head, Employee, and other involved parties. For example, the target to reduce GHG by 12.6% in 2023 (from the base year) will be one of the ESG OKRs (Objectives and Key Results) for the CEO and executive management. These targets will then be cascaded to the management and employees of the Customer and Enterprise Service Fulfillment Division, as this department is responsible for activities related to energy management and environmental management of main building.

## Metric and Target to Achieve Net Zero Emissions in Our Own Operations (Scope 1 & 2)

In order to be aligned with the Paris Agreement on climate commitment, KBank has developed a target to reduce Scope 1 and Scope 2 GHG emission using the guideline and recommendation from the Science-Based Target initiative and committed to becoming Net Zero in our own operations (Scope 1, 2) by 2030.





## Own Operation Performance (Scope 1 and 2)

In 2023, KBank decreased GHG emissions (Scope 1 & 2) by 12.74 percent from 2020 base year (compared to the target of 12.6 percent reduction from 2020 base year). The table below provides statistics documenting our environmental performance.

Parameter	Unit	Performance				Target 2023	Performance 2023 vs Base year 2020
		2020 (Base year)	2021	2022	2023		
<b>Greenhouse Gas Emission (GHG Emission)</b>							
Total Scope 1 emission	Tonnes CO <sub>2</sub> e	18,727.05	15,833.59	11,232.01	15,467.65		
Total Scope 2 emission (Location based)	Tonnes CO <sub>2</sub> e	69,105.49	64,980.29	61,336.01	64,034.31		
Total Scope 2 emission (Market based)	Tonnes CO <sub>2</sub> e	69,105.49	64,980.29	61,141.55	61,174.88		
Total Scopes 1 & 2 emission**	Tonnes CO <sub>2</sub> e	87,832.54	80,813.88	72,373.56	76,642.53	76,765.64 (12.6% reduction from base year 2020)	-12.74%
Total Scopes 1 & 2 emission intensity**	Tonnes CO <sub>2</sub> e per FTE	2.66	2.55	2.30	2.40		
Full Time Employee	FTE	33,034	31,706	31,469	31,868		

\* In 2023, GHG Emission (Scope 1) specifically for the leakage of refrigerant and fire extinguishing substances in only major buildings of KBank and excluding GHG Emission from chilled water of KBank's branches located in department store.

\*\* In 2023, GHG Scope 2 emission factor has been changed from 0.5719 to 0.4999 kg CO<sub>2</sub>e/kWh, resulting in the restatement of GHG Scope 2 emissions from 2023 towards the base year 2020. Moreover, the calculation of Total GHG (Scope 1 & 2) was conducted on the basis of GHG Scope 2 Market-Based, where purchases of Renewable Energy Certificate (5,720 units) in 2023 were taken into account.

Parameter	Unit	Performance				Target 2023
		2020	2021	2022	2023	
<b>Energy</b>						
Total fuel consumption within the organization from renewable sources***	MWh	9,499.68	8,167.06	27,674.46	27,939.49	
Total energy consumption within organization from renewable and non-renewable sources	MWh	213,091.98	186,564.30	188,807.49	195,717.65	
Total renewable energy consumption/ Total Energy Consumption within Organization	%	4.46%	4.38%	14.66%	14.28%	14.27%
<b>Water and Effluents</b>						
Total water withdrawal	m <sup>3</sup>	781,862	615,550	571,827	647,819	
Total water discharge to surface water	m <sup>3</sup>	511,935	332,963	413,497	405,183	
Total water consumption	m <sup>3</sup>	269,927	282,587	158,330	242,637	
Water withdrawal intensity	m <sup>3</sup> per FTE	23.67	19.41	18.17	20.33	18.17
<b>Waste</b>						
Total waste generated	Metric Tonnes	5,851.33	5,494.61	4,918.38	4,166.97	
Total waste used/ recycled/ sold/ others	Metric Tonnes	1,956.00	2,947.59	1,504.82	1,879.22	
Total waste disposed	Metric Tonnes	3,895.33	2,547.02	3,413.56	2,287.75	
Waste generation intensity	kg. per FTE	177.13	173.30	156.29	130.76	132.85
<b>Greenhouse Gas Emissions from Business Travel</b>						
Total CO <sub>2</sub> e emission from road travel****	Tonnes CO <sub>2</sub> e	752.58	612.61	613.62	1,136.50	
Total CO <sub>2</sub> e emission from air travel*****	Tonnes CO <sub>2</sub> e	363.96	36.77	934.11	1,789.80	
Total CO <sub>2</sub> e emission from business travel	Tonnes CO <sub>2</sub> e	1,116.54	649.38	1,547.73	2,926.30	
Total CO <sub>2</sub> e emission from business travel per FTE	Tonnes CO <sub>2</sub> e per FTE	0.03 (0.0338)	0.02 (0.0206)	0.05 (0.0492)	0.09 (0.0918)	

\*\*\* Including the original energy source from the production of Solar Cells and using REC and Bio-based oil ingredients.

\*\*\*\* The bank reports greenhouse gas emissions. Business from road travel does not include travel by K-Leasing companies.

\*\*\*\*\* The bank reports greenhouse gas emissions Business from air travel only for KBank.





## Metric and Target to Achieve Net Zero Emissions in Financed Portfolio (Scope 3)

KBank is committed to achieving Net Zero in our financed portfolio in line with Thailand's aspirations, accelerating this journey where possible. We will continually assess opportunities to take earlier actions as the technology, regulatory environment and external context evolves.

In addition, in 2023 the Bank has expanded emission calculation and reporting boundary to other asset classes beyond the 2022 boundary, namely motor vehicle loans and mortgages.

### Greenhouse Gas Emissions from KBank's Loan and Investment Portfolio

Types of assets/sectors	2022 <sup>(1)</sup>						2023					
	Portfolio allocation	Absolute GHG emissions (Tonnes of CO <sub>2</sub> equivalent)		Weighted score of data quality <sup>(2)</sup> (Highest quality = 1 Lowest quality = 5)		Emissions Intensity <sup>(3)</sup> (Scope 1+2) (Tonnes of CO <sub>2</sub> equivalent to USD 1 million of investment or loan)	Portfolio allocation	Absolute GHG emissions (Tonnes of CO <sub>2</sub> equivalent)		Weighted score of data quality <sup>(2)</sup> (Highest quality = 1 Lowest quality = 5)		Emissions Intensity <sup>(3)</sup> (Scope 1+2) (Tonnes of CO <sub>2</sub> equivalent to USD 1 million of investment or loan)
		Scope 1+2	Scope 3 <sup>(4)</sup>	Scope 1+2	Scope 3			Scope 1+2	Scope 3 <sup>(4)</sup>	Scope 1+2	Scope 3	
By asset classes according to PCAF standard												
Business Loans and Unlisted Equity	100% of corporate bonds, listed and unlisted equity, and business loan	13,486,639	18,471,275	4.2	4.2	300.0	100% of corporate bond, listed and unlisted equity, and business loans	12,977,636	18,964,195	4.2	4.2	287.3
Listed Equity and Corporate Bonds		79,731	209,534	4.2	4.3	40.4		58,685	163,165	4.4	4.5	45.2
Project Finance Loans	100% <sup>(5)</sup>	4,227,346	-	3.0	-	2,709.0	100% <sup>(5)</sup>	3,469,414	-	3.0	-	2,654.1
Motor Vehicle Loans	-	-	-	-	-	-	99.7%	673,324	-	3.8	-	165.0
Mortgages Loans	-	-	-	-	-	-	84.9%	367,800	-	4.0	-	39.3
<b>Total</b>		17,793,716	18,680,809	4.2	4.3	366.9		17,546,859	19,127,360	4.1	4.2	286.6



Types of assets/sectors	2022 <sup>(1)</sup>						2023					
	Portfolio allocation	Absolute GHG emissions (Tonnes of CO <sub>2</sub> equivalent)		Weighted score of data quality <sup>(2)</sup> (Highest quality = 1 Lowest quality = 5)		Emissions Intensity <sup>(3)</sup> (Scope 1+2) (Tonnes of CO <sub>2</sub> equivalent to USD 1 million of investment or loan)	Portfolio allocation	Absolute GHG emissions (Tonnes of CO <sub>2</sub> equivalent)		Weighted score of data quality <sup>(2)</sup> (Highest quality = 1 Lowest quality = 5)		Emissions Intensity <sup>(3)</sup> (Scope 1+2) (Tonnes of CO <sub>2</sub> equivalent to USD 1 million of investment or loan)
		Scope 1+2	Scope 3 <sup>(4)</sup>	Scope 1+2	Scope 3			Scope 1+2	Scope 3 <sup>(4)</sup>	Scope 1+2	Scope 3	
By sectors (business loans and project finance loans)												
Municipal power generation and municipal water	100% of business loans and project finance <sup>(5)</sup>	4,676,798	-	2.9	-	-	100% of business loans and project finance <sup>(5)</sup>	3,620,908	-	3.1	-	-
Oil and gas		2,768,426	3,045,964	3.9	3.9	-		2,615,769	3,244,476	3.8	3.9	-
Cement		850,088	220,158	4.4	4.4	-		740,709	200,208	4.1	4.2	-
Agriculture		720,436	-	4.5	-	-		783,184	-	4.5	-	-
Transportation		654,163	742,653	4.3	4.3	-		746,301	863,015	4.1	4.2	-
Iron and steel		492,727	378,188	4.1	4.1	-		489,972	374,997	4.1	4.1	-
Coal		362,448	336,116	2.2	2.2	-		131,948	322,596	2.2	2.2	-
Aluminium		64,973	97,724	3.2	3.2	-		56,370	92,096	2.9	2.9	-
Real estate		18,005	-	4.1	-	-		39,212	-	4.0	-	-
Other sectors <sup>(6)</sup>		7,102,302	13,612,599	4.3	4.3	-		7,222,004	13,856,436	4.3	4.3	-
<b>Total</b>		17,710,366	18,433,402	4.2	4.2	382.3		16,446,376	18,953,824	4.2	4.2	354.3

## Remarks:

- To ensure compatibility of greenhouse gas emission data, the Bank has conducted restatement of 2022 emissions previously reported in 2022 Sustainability Report. The Bank has revised the option selected for emission calculation to improve data quality, as well as updating emission factors used in the calculation, referring to PCAF calculation methodology and database (latest version: September 2023) to ensure alignment with 2023 emission calculation methodology.
- Weighted score of data quality was calculated by applying weighted loan or investment amount, according to PCAF standard for financed emissions.
- The unit used to report emission intensity is tonnes of CO<sub>2</sub> equivalent to USD 1 million of investment or loan (mUSD), according to PCAF standard (previously, the unit used was tonnes of CO<sub>2</sub> equivalent to Baht 1 million of investment or loan (mTHB)). Currency conversion referred to the exchange rate as announced by The Bank of Thailand on the last business day of the year.
- PCAF standard for financed emissions requires disclosure of Scope 3 GHG emission of only oil & gas, mining, transportation, construction, buildings, materials, and industrial activities sectors.
- Project finance reporting boundary covered only power plants within municipal power generation and municipal water sector.
- Other sectors comprised of: automotive and parts, chemical and chemical products, commerce agriculture, commerce consumer, commerce industrial, communication, construction, construction materials other, digital and technology, electronic & appliances, entertainment, fashion, financial institute, food and beverage, furniture & wood, hardware, hotels and restaurants, industrial agriculture, other metals, packaging and printing, pharmaceutical & hospital, services, and etc.



## Limitation

Calculation of estimated GHG emissions under Category 15: Investment of Scope 3 from KBank's financing and investment portfolio requires readiness and granularity of data in multiple dimensions, ranging from data of the Bank, data of the clients, as well as data from other independent organizations, to enable and enhance the precision of portfolio emission calculation as well as to inform decarbonization strategies in line with the Bank's target. Thus, KBank has put in place data capability development plan to improve data collection, data analysis, as well as database management. Nonetheless, the calculated portfolio emissions may fluctuate over a period of time, which will be reflected through the changing scores of data quality. The Bank expected that the score of data quality will increase over time. In case that clients' reported emission data is absent, the Bank will calculate estimated GHG emissions using other available information such as production capacity, sectorial emission factors per unit revenue/asset, etc. In addition, emission factors may change over time in accordance with the PCAF database used as reference.

In certain cases, calculation of KBank's portfolio emissions experienced limitation regarding lag time of necessary data and factors due to reporting cycle of third party, such as clients' reported emissions, clients' financial information, etc. In such cases, the Bank utilizes latest information available to calculate GHG emissions.

## Supporting Emission Reduction through Green Loans

In parallel with managing our financed portfolio emissions, KBank recognized the significant role and duty of financial institutions in supporting our clients to seize emerging climate opportunities and move towards timely climate transition, particularly for SMEs and companies at the very beginning of their climate journeys.

Key examples of green loans enabling emission reduction and avoidance include Green Loan for Business (such as Solar projects and Energy Efficiency projects). Estimations of greenhouse gas avoidance were conducted starting from project initiation, including since 2014, accumulated throughout 2023 given the long life expectancy for projects of these nature. Based on project installed capacity as well as other conditions such as estimated number of operating hours, equipment efficiency over project lifetime, as well as emission factors of grid electricity that would have been consumed had the projects not been in place, green loans for solar and energy efficiency projects are expected to have contributed to 193,143 tCO<sub>2</sub>e of cumulative emission avoided since project initiations until 2023.

Releases of greenhouse gases into the atmosphere worsen the conditions of climate crisis and further burdens the environment and the society with increased cost to survive in and recover from the impacts, including but not limited to increased food cost, health issues, property damage from increased natural disasters, i.e. Social Cost of Greenhouse Gases (SC-GHG). On the other hand, prevention of further greenhouse gas releases helps the society avoid the SC-GHG cost from increasing. With the estimated cumulative emission avoidance of 193,143 tCO<sub>2</sub>e from the aforementioned Green Loan for Business (such as Solar projects and Energy Efficiency projects), the estimated emission avoidance can be translated to social cost avoided of approximately Baht 375 million\*.

\* Social cost avoided was calculated according to Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide. Interim Estimates under Executive Order 13990, by Interagency Working Group on Social Cost of Greenhouse Gases, United States Government. [https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument\\_SocialCostofCarbonMethaneNitrousOxide.pdf](https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf)



## Sustainability Financing and Investment

### 1. Environmental Loans, total outstanding Baht 70,142.14 million

#### 1.1 Green Loans for Corporate Customers



Loans for Corporate Customers	Product Description	Outstanding Loans in 2023 (MB)
Loans for domestic renewable energy	Loans provided for domestic renewable energy projects, including solar energy, biomass energy, waste-to-energy, biogas energy, wind energy	4,327.04
Loans for overseas renewable energy	Loans for renewable energy in foreign countries, i.e., wind energy	8,685.50
Other loans for activities/projects of environmental conservation or environmental friendliness	Loans for activities/projects of environmental conservation or environmental friendliness include, for example, green home projects using environmentally friendly materials, purchase of eco-friendly products/equipment.	2,574.41
Loans for alternative energy vehicles	Loans that promote transport that uses clean energy, including auto loans for hybrid and electric cars (B2B)	3,725.99
Loans for large property projects with environmentally friendly concept	Loans for large property projects with environmentally friendly concept, for example, Eco-system Eco-plex projects and green buildings in accordance with the standards of Leadership in Energy and Environmental Design (LEED) of the United States Green Building Council (USGBC).	6,154.47
Loans for energy and environmental conservation	KBank has provided incentives via loans with special conditions to businesses that undertake environmentally friendly operations, in terms of minimization of pollution and efficient utilization of natural resources, namely solar rooftop installation, building renovation and other energy conservation measures.	3,440.23
Loans for environmental conservation	Loans for environmental projects in other countries includes procurements for solar energy, pollution prevention and control to mitigate air pollution impacts from power plants, and energy efficiency improvement projects	4,886.58
Loans to support products, production technologies and production processes with environmental efficiency and/or improvement to promote circular economy	Loans for alternative energy, products, production technologies and production processes with environmental efficiency and/or improvement to promote circular economy, as well as sustainable management of garbage and waste certified with environmental standards, e.g., biofuel production plants, treatment and disposal of non-hazardous waste by biological methods, etc.	1,118.32
Loans related to sustainability operations (sustainability linked loans – SLLs)	KBank has granted special privileges to business operators who have achieved the established targets within the loan periods, in order to inspire those operating businesses that are environmentally and societally friendly, including alleviation of pollution and efficient use of limited resources, and minimization of adverse impacts on community residents, as well as being committed to the UN Sustainable Development Goals, e.g., reduction of GHG emissions, and reduced energy and natural resource consumption.	5,434.48
<b>Total green loans for corporate customers</b>		<b>40,347.02</b>



## 1.2 Green Loans for SME Customers

Loans for SME Customers	Product Description	Outstanding Loans in 2023 (MB)
Loans for energy and environmental conservation	KBank has provided loans with special interest rates for projects such as energy-saving loans, improvement of systems and operational processes to reduce energy consumption in business premises, solar rooftop installation, renewable energy consumption in business operations, building renovation for energy conservation.	1,615.15
Loans to support products, production technologies and production processes with environmental efficiency and/or improvement to promote circular economy	Loans for alternative energy, products, production technologies and production processes with environmental efficiency and/or improvement to promote circular economy, as well as sustainable management of garbage and waste certified with environmental standards, e.g., biofuel production plants, treatment and disposal of non-hazardous waste by biological methods, etc. Classified by sub-objectives: <ul style="list-style-type: none"> <li>Loans for alternative energy Outstanding loans: Baht 269.24 million</li> <li>Loans for sustainable management of garbage and waste certified with environmental standards Outstanding loans: Baht 165.03 million</li> <li>Loans for products, production technologies and production processes with environmental efficiency and/or improvement to promote circular economy Outstanding loans: Baht 1,493.21 million</li> </ul>	1,927.48
<b>Total green loans for SME customers</b>		<b>3,542.63</b>

## 1.3 Green Loans for Retail Customers

Projects/Products	Outstanding Loans in 2023 (MB)
Auto loans for hybrid and electric vehicles	17,270.87
Green home loans	8,981.62
<b>Total green loans for retail customers</b>	<b>26,252.49</b>

Remark: The above classification is in accordance with the Green Loan Principles of the Loan Market Association (LMA).



## 2. Beyond Financial Solutions

**2.1 SolarPlus Project** KBank has developed the SolarPlus Platform, which provides e-Marketplace platform service to promote a green ecosystem and support services related to clean energy. Initially, KBank's key customer segment included the current individual and business customers in the Bangkok metropolitan area, to whom notifications were sent via K PLUS to disseminate information on solar rooftop installation. Interested customers may register and choose a solar rooftop installer that matches their requirements. Customers and companies that provide solar rooftop installation services enter into a power purchasing agreement and KBank has provided credit support to solar rooftop installation companies. This project is aimed at promoting access to clean energy and moving our mission forward to achieve the Net Zero goals of KBank and Thailand.

**2.2 Electric Bike Rental Service** The Bank has introduced the WATT'S UP platform, a one-stop service where users can select electric motorcycle for rent from a wide range of models, make payments, identify other WATT'S UP stations, as well as battery swap, and launched a pilot program with three branches of Thailand Post which resulted in a satisfactory performance at the end of 2023. This year, the Bank aims to strengthen the platform's offerings by expanding the focus to real-life users such as regular electric motorcycle riders, first-time electric motorcycle users, as well as provision of leasing options. The Bank also aims to expand business partnerships to bring in a larger range of electric motorcycle models to the platform as well as to expand the network of battery exchange stations available on the WATT'S UP platform to cover users' needs and attract more users. The expected cost is approximately Baht 70 - 100 million per year. As part of active contributions for Thailand aspiration towards a Zero Pollution Society, as well as to uplift growth and comprehensiveness of electric motorcycle Green Ecosystem in the country, both of which are key objectives of the WATT'S UP program, KBank has included WATT'S UP platform plan into our strategic plans by integrating all financial services concerned, such as loans and insurance for electric motorcycles into WATT'S UP platform, in order to provide platform users with instant access to a wide range of services. In the next 5 - 10 years, the estimated revenue from this project is expected to exceed Baht 230 million per year.

## 3. Green and Sustainability Investment

In recognition of the importance of investment for the environment, KBank has issued and invested in sustainability bonds with the following details:

### 3.1 Issuance of Sustainability Bonds\*

In 2022, KBank issued YEN-denominated sustainability bonds, with 2- and 3-year maturities, USD-denominated sustainable bonds, with 3-year maturity, totaling USD 84 million (equivalent), offering for sales to domestic investors, so as to promote financing for environmentally and socially friendly businesses, such as loans of energy and environmental conservation loans, renewable energy loans and loans to promote employment in society. KBank is the first bank in Thailand and ASEAN to issue sustainability bonds in accordance with global standards set up by the International Capital Market Association (ICMA) and the ASEAN Green, Social and Sustainability Bond Standards of the ASEAN Capital Markets Forum (ACMF)

Operating Performance\* (Information as of September 2023) Bonds have been managed by lending the full amount to environmental and social projects approved by the Board of Directors, based on their environmental and social promotion, and benefits in other fields, as follows:

#### 1. 5 projects with environmental aspect

- 1.1 Four solar energy projects, having a total production capacity of 456 megawatts and generating electricity of 736 million kilowatt-hours.
- 1.2 One large-scale property project with an environmentally friendly concept and design (Green Building), which takes into account efficient use of resources, energy and environment, and is expected to be certified with Gold/Platinum level of Leadership in Energy and Environmental Design (LEED) by the United States Green Building Council (USGBC) and Platinum level of WELL Building Standard (WELL) by the International WELL Building Institute (IWBI), upon its construction completion and opening in 2024.

\* More details of sustainability loans and second party opinions can be found at <https://www.kasikornbank.com/en/sustainable-development/sustainability-bond/Pages/Sustainable-Bond-Report.aspx>



## 2. 4 projects with social aspect

2.1 Three projects promoting employment generation and supporting SMEs, franchise business groups and retail shops in communities, which have extended loans to 2,797 retail customers.

2.2 One project supporting access to essential services, which has extended loans to 300 customers.

## 3.2 Investment in Bonds for the Environment and Sustainability

KBank's total investment in sustainability bonds amounted to Baht 36,045 million, to support fund raising for projects that are environmentally friendly and energy saving, and for development and promotion of sustainability, with the following details:

3.2.1 Investment in Green Bonds: KBank has invested in green bonds for wind energy and clean transportation projects. These bonds have been certified by internationally accepted standards, namely the ASEAN Green Bond Standards (ASEAN GBS), Climate Bond Standard (CBS), International Capital Market Association Green Bond Principles (ICMA-GBP), and LMA Green Loan Principles (LMA-GLP).

3.2.2 Investment in Sustainability Bonds and Sustainability-Linked Bonds: KBank has invested in sustainability bonds related to social and economic development, and promotion of environmental conservation. These bonds have been certified by the ASEAN Green Bond Standards, Social Bond Standards and Sustainability Bond Standards (ASEAN-GBS, SBS, SUS), International Capital Market Association Green Bond Principles standard, Social Bond Principles, Sustainability Bond Guidelines, and Sustainability-Linked Bond Principles (ICMA-GBP, SBP, SBG, SLBP), and LMA Green Loan Principles and Sustainability Linked Loan Principles (LMA-GLP, SLLP) standard.

## 3.3 Issuance of Risk-hedging Bonds, Issuance and Underwriting of Bonds linked with Economic, Social and Environmental Activities

3.3.1 Issuance of ESG-linked Hedging Instruments: KBank has been continuously providing ESG-linked hedging instruments since 2021. In 2023, KBank and Minor International Public Company Limited (MINT) have successfully concluded a sustainability-linked interest rate swap agreement to manage interest rate risks. The agreement is linked with GHG emission reduction and water management targets. By attaining the established GHG emission reduction and water management targets, customers will be able to pay more favorable interest rates as agreed upon in the contract. This transaction, therefore, is consistent with KBank's commitment to ESG principles, and is considered part of the Bank's business operations that are based on the principles of the Bank of Sustainability.

3.3.2 Issuance of Risk-Hedging Carbon Credit Linked FX Forward Contract: KBank moved a step further with financial innovation to support participation in GHG emission reduction activities through the successful launch of Thailand's first "Carbon Credit Linked FX Forward Contract" in conjunction with Bangchak Corporation Public Company Limited. Such contract stipulates that when the customer engages in qualified carbon credit activities, the contracted exchange rate will be executed. This reaffirms the Bank's commitment to continue launching innovative financial product to demonstrate our position as a leader of the Treasury and Capital Markets Business in the country. KBank stands ready to enhance the liquidity of Thai Carbon Credit Market which help increase public awareness of carbon credits related transactions, with the intended outcome of stimulating greenhouse gas reduction and driving Thailand towards Net Zero in a sustainable manner.

3.3.3 Green Bond Underwriting: KBank has assisted our customers in transitioning to the Net Zero economy via underwriting of bonds for environmental conservation, as follows:

- Co-underwriting of "Green Bonds of Gulf Energy Development PCL, No. 1/2023 Tranche 2 due 2028" and "Green Bonds of Gulf Energy Development PCL, No. 1/2023 Tranche 3 due 2030" totaling Baht 8,000 million, with the aim of investment and/or repayment of partial or total loans of new and/or existing projects related to environmental conservation.
- Co-underwriting of "Green Bonds of WHA Utilities & Power PCL, No. 2/2023 due 2028" amounting to Baht 500 million, with the aim of replacing the company's funds that were used to invest in renewable energy projects.



#### 4. Environmental and Sustainability Funds\*

with Net Asset Value of Baht 22,972.71 million



Environmental and Sustainability Funds with Net Asset Value of  
Baht  
**22,972.71**  
million

Projects/Products	Details of Products	Net Asset Value** (MB)
K-PLANET-A (A) KPLANETRMF <sup>(1)</sup> Funds	The first funds in Thailand that invest in high-growth potential and sustainable stocks worldwide, focusing on 3 themes, i.e., energy, soil-ocean and materials, relevant to reduction of climate change problems.  These will be channelled through LO Funds – Planetary Transition, (USD), and I Class A.	-A(A): 2,277.78 RMF: 14.90
K-CHANGE -A (A) K-CHANGE-SSF K-CHANGE-RMF K-CHANGE-C (A) Funds <sup>(2)</sup>	Funds invest in businesses that have positive impacts on the world. Its investments are placed in global stocks via the master funds: Baillie Gifford Positive Change Fund – Class B accumulation (GBP) that selects 25 - 50 companies having high growth potential and the capability to create positive impacts in four major areas, namely social and educational equality, natural resources and environment, healthcare and promotion of quality of life, and assistance for economically underprivileged people.	-A(A): 10,253.31 SSF: 4,511.60 RMF: 3,944.25 -C(A): 5.8
K-STN-UI-A9A) Fund <sup>(3)</sup>	The K-SUSTAIN Fund is Thailand's first sustainability fund that focuses on generating profits from stocks that are positively or negatively affected by the transition towards sustainable business operations. The fund invests via JP Morgan Funds – Multi-Manager Sustainable Long-Short Fund, Class JPM S2 (perf) (acc) – USD, which is focused on sustainability megatrends in five business categories: energy transition, health and wellness, empowerment, resource efficiency and technology for sustainability.	204.40
KTHAICGRMF Fund <sup>(4)</sup>	The KTHAICGRMF is focused on investment in companies with good corporate governance and are certified as member of the Thai Private Sector Collective Action Against Corruption (CAC). Good corporate governance may be considered from CG Scoring by the Thai Institute of Directors or other related agencies.	377.36
K-TNZ-ThaiESG Fund <sup>(5)</sup>	The Fund aims to promote mitigation of the climate change impacts and the portfolios are managed with the goal of the Portfolio Temperature Alignment is lower than the benchmark and encourage the business sector to be a part in driving Thailand to meet the goal of Net Zero greenhouse gas (GHG) emissions by 2065, in line with the Paris Agreement.	1,382.31
<b>Total NAV of Environmental and Sustainability Funds*</b>		<b>22,972.71</b>

\* Environmental and sustainability funds of KASIKORN ASSET MANAGEMENT (as of January 19, 2024)

\*\* NAV represents the value of trading funds via the channel of KBank only.

(1) Total NAV of K-Climate Transition Fund is Baht 2,298.68 million

(2) Total NAV of K-CHANGE Fund is Baht 18,714.96 million

(3) Total NAV of K- SUSTAIN Fund is Baht 204.4 million

(4) Total NAV of KTHAICGRMF is Baht 377.36 million

(5) Total NAV of K-TNZ-ThaiESG is Baht 1,382.31 million





# Climate Collaboration

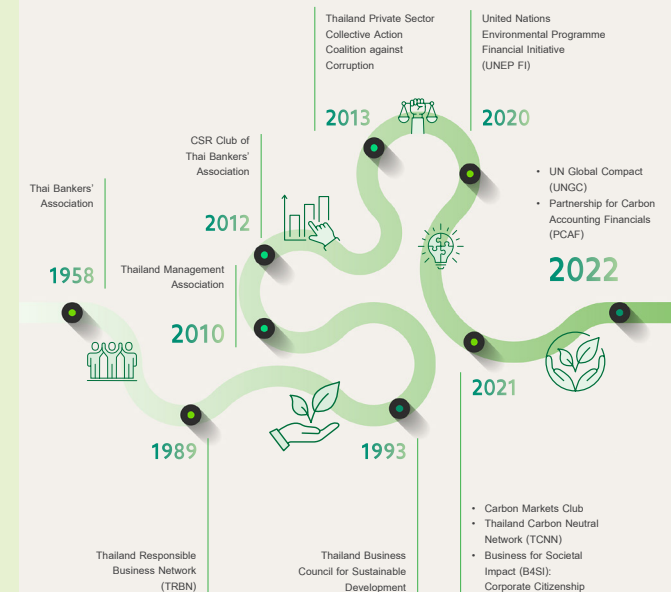
## Customer Engagement

In 2023, KBank promoted customer engagement in multiple patterns, as follows:

- Corporate customers: Relationship Managers and related department, i.e., the Active Credit Portfolio Management Department, created customer engagement with respect to transition towards sustainability for businesses that could be affected by future regulatory requirements and international trade regulations, namely transport businesses, businesses affected by CBAM and businesses related to electricity generation.
- SME customers: Knowledge was provided via numerous channels, namely:
  - KBank representative served as a speaker at a seminar, entitled Sustainable Management of Metal Scraps Project, jointly organized by Department of Primary Industries and Mines and the United Nations Industrial Development Organization (UNIDO), to disseminate knowledge for entrepreneurs in metal and steel industry in order to create sustainable management and recycle of metal scraps.
  - KBank representative served as a speaker in a seminar, entitled “The Vinyl Sustainability Forum 2023 – The Episode of PVC Circularity”, organized by the ASEAN Vinyl Council to disseminate knowledge and guidance to plastic industry entrepreneurs in using more recycled plastic.
- Retail customers: Knowledge was provided via numerous channels, namely: To provide access to home loans for energy-saving home to customers, KBank has initiated a Green Home Loan campaign, under cooperation with 15 leading property developers, in offering energy-saving houses in more than 500 property projects nationwide, together with special interest rates and incentives.



## Membership of Organizations in Driving Sustainability





## Cooperation with Partners to Alleviate Climate Change Impacts

The Bank recognizes the importance of collaborating with external agencies, including government and private sector organizations, trade associations, and other groups both domestically and internationally. This collaboration aims to effectively drive climate change-related initiatives in line with the Paris Agreement and Thailand's goals. The Bank has assigned the Subcommittee for Sustainability, chaired by the Chief Executive Officer (CEO) and comprising senior executives, to oversee these collaborations and support external agencies in accordance with the appropriate guidelines and objectives.

The Bank has established a management system for collaborating with or supporting external organizations as follows:

- Initiating collaboration, support, or membership in external organizations or associations related to climate change management is initially considered by the relevant line management. If the activity may significantly impact the Bank, it is presented to the Sustainable Development Sub-committee for approval. The key factors for consideration include alignment with the Paris Agreement, Thailand's goals, and the Bank's objectives.
- Relevant departments continuously monitor the outcomes of the collaboration, support, or membership in external organizations or associations to evaluate results and focus on continuous improvement. If it is found that the related activities do not align with the Paris Agreement, Thailand's goals, or the Bank's objectives, the relevant departments will attempt to adjust or drive the activities to ensure

alignment and achieve the goals. If changes cannot be made, the Bank will consider ceasing the collaboration, support, or membership to ensure the effectiveness and efficiency of the Bank's climate change mitigation efforts.

- Significant activities related to collaboration, support, or membership in external organizations or associations are reported periodically to the Sustainable Development Sub-committee for appropriate oversight.

Currently, the Bank is a member of associations or groups involved in climate change management, such as the UN Global Compact, Carbon Neutral Network, and Carbon Market Club. Additionally, in 2023, the Bank has collaborated with external agencies to address significant climate change issues as follows:

### Cooperation with Domestic Agencies

- KBank cooperated with the Ministry of Interior, Interior Housewives Association and UN Thailand in delivering Carbon Credit Purchase Project from local administrative organizations in four pilot provinces, the first ever purchase in Thailand. KBank purchased 3,140 tonnes of CO<sub>2</sub> equivalent, valued at Baht 816,400 from "Wet Garbage Bin to Reduce Global Warming" project.
- KBank organized an in-depth seminar, entitled "Decarbonize Now" for four industrial groups throughout November. They were power generating business, construction and property businesses, and export-oriented business facing risks from CBAM measures. Customers from more than 130 companies participated in the event, in which they received in-depth knowledge for each industry, together with workshops for

calculating carbon emission, and trial uses of calculating tools for greenhouse gas emission. It was expected that the customers would be able to actually reduce greenhouse gas emission, in order to drive Thailand towards achievement of Net Zero targets.

- KBank, in cooperation with Thailand Greenhouse Gas Management Organization (TGO), jointly signed a Memorandum of Understanding to undertake studies and to develop a carbon exchange platform, together with a guideline for carbon credit management, in order to encourage entrepreneurs and the general public to participate in sustainable reduction of greenhouse gas emission. These will ensure easy access and actual use of the carbon credit exchange platform, to drive Thailand towards achievement of Net Zero targets.

### Cooperation with International Agencies

- KBank cooperated with the Agence Francaise de Developpement (AFD) from France, in delivering a Green Building Project to provide credit supports for entrepreneurs in their transition towards green building to save energy and to reduce global warming effects under the K-Green Building Program available for commercial buildings as special loans. Additionally, seminars were arranged to provide knowledge about green building and energy conservation for entrepreneurs.
- KBank cooperated with the Global Green Growth Institute to undertake a feasibility study regarding investment projects focusing on circular economy and use of cutting-edge renewable energy, together with development of credit package for those facing limited credit access.



# About This Report

## Environmental Aspect Information

The environmental aspect information in this report covers activities considered by KBank to have significant impacts on the environment and has been compiled by KBank that produce environmental impacts. The environmental aspect information comes from different sources, e.g., recording gauges, accounting evidence, operating processes, and data evaluation on quality principles.

## Energy

Total energy consumption consists of non-renewable energy, including electricity and energy from fuel combustion – and renewable energy, including solar power as well as the amounts of biodiesel and bio-gasoline in the fuel ratio. The information is derived from accounting data, meter readings and energy unit conversion based on the annual energy report of Department of Alternative Energy Department and Efficiency.

## Water

Water management involves water from external sources, recycled water, discharged and reused water. Evaluation of water utilization efficiency and risk from different water sources is in place. Water from external sources is used for KBank's activities. The information is extracted from the accounting data.

## Waste

Waste management covers total waste generated through KBank's operations and activities. The quantity of waste refers to the quantity of waste generated through KBank's operations and activities, and the quantity of waste recorded in this report was based on valid estimation of the quantity of municipal solid waste from Rat Burana Building, Phahon Yothin Building, Chaeng Watthana Building, KBTG Building and KBank Learning Center in Bang Pakong, and based on theoretical estimation of waste generation from other buildings apart from the aforementioned.

## Greenhouse Gas Emissions

This exhibits greenhouse gas (GHG) emissions from operations or activities of KBank, calculated in compliance with the report, Intergovernmental Panel on Climate Change (IPCC) guidelines and carbon footprint calculation guidelines of Thailand Greenhouse Gas Management Organization (Public Organization).

### 1. Report Boundaries

- 1.1 Direct emissions (Scope 1) occur through operating processes and activities under KBank's monitoring, control, and management, including fuel or natural gas combustion and the leakage of methane gas from septic tank and refrigerant leaks only.
- 1.2 Indirect emissions (Scope 2) occur mainly from the amount of electricity bought from external sources for KBank's operations, including power directly purchased from Metropolitan Electricity Authority and Provincial Electricity Authority and indirectly from lessors.
- 1.3 Other indirect emissions (Scope 3) occur from KBank business travel by land transport, water withdrawal and investment only.



## 2. Report on Intensity

- 2.1 The calculation of Scope 1 GHG emissions is based on fuel consumption (by weight or quantity), e.g., the quantity of oil or natural gas x emission factor and the leakage of methane gas from septic tank and refrigerant leaks.
- 2.2 The calculation of Scope 2 GHG emissions is based on the quantity of purchased electricity x emission factor.
- 2.3 The calculation of GHG emissions incurred indirectly through other means (Scope 3) is based on KBank business travel by land transport and acquisition of tap water x emission factor.
- 2.4 The calculation of GHG emissions incurred indirectly through Bank's investment (Scope 3 category 15: Investment) is based on Bank's commercial loan, project finance, corporate bond, equity, motor vehicle loan and mortgage in 2023.

## 3. Greenhouse Gas Emissions

The GHG emissions report covers CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs and SF<sub>6</sub>, calculated and illustrated in the form of carbon dioxide equivalent (CO<sub>2</sub>e), indicating Global Warming Potential (GWP) as designated by IPCC.

## 4. Emission Factor

- 4.1 Scope 1 and 2 GHG emissions: Based on the reference rates of the IPCC 2006, United States Environmental Protection Agency (EPA), Department for Business, Energy and Industrial Strategy, the UK Government (BEIS) and Thailand Greenhouse Gas Management Organization (Public Organization) as well as fuel heat rate of the Department of Alternative Energy and Efficiency.

- 4.2 For scope 3 emissions category 15: Investment, emission factors per energy source are from Thailand Greenhouse Gas Management Organization (Public Organization). Emission factors per energy consumption or production capacity are sourced directly from the report of organization within portfolio. And emission factors for the sector per unit of revenue or asset are sourced from PCAF web-based emission factor database.

## 5. Assessment Methods

- 5.1 Based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard Revised Edition and corporate carbon footprint assessment of Thailand's Greenhouse Gas Management Organization (Public Organization), Fourth Revision, December 4, 2018.
- 5.2 Calculation of decline in GHG emissions resulting from the use of financial products and services via digital channels based on the Attributional approaches on Guidelines for Assessing the Contribution of Products to Avoided Greenhouse Gas Emissions (ILCA 2015).
- 5.3 Calculation of Scope 3 (Category 15: Investment) is based on PCAF's methodology by determining the proportional share of outstanding amount of loans and investments of the financial institution over the company/project value with the amount of GHG emissions from the borrower, investee, and project. The amount of GHG emissions from the borrower, investee and project could be estimated from three main approaches respectively, depending on availability of data, as follows:

- Option 1: Reported emissions
- Option 2: Physical activity-based emissions, such as energy consumption
- Option 3: Economic activity-based emissions

PCAF : The general approach to calculate financed emissions

$$\text{Financed emissions} = \sum_i \text{Attribution Factor}_i^* \times \text{Emission}_i$$

$$^* \text{Attribution Factor}_i = \frac{\text{Outstanding amount}_i}{\text{Total equity} + \text{debt}_i}$$

(i = Borrower or investee)

## 6. Assumption of GHG

Business travel by land transport to carry out KBank business, including taxi travel, is based on the average emission from car related land travels. Calculation is done by collecting total distance travelled data through direct distance data, in Kilometers (KM), and proxy calculations from spend-based data available via travel claims, to approximate KM data equivalent.

Business travel by air to carry out KBank business is based on emission factor from relevant air travel class. Calculation is done by collecting total distance travelled, flight travel grouping (short haul, medium haul, long-haul) and air travel class through air travel purchasing order, multiplied by emission factor appropriate for the air travel class and the flight travel grouping for each passenger.



# Assurance Statement

## LRQA Independent Assurance Statement Relating to KASIKORNBANK PUBLIC COMPANY LIMITED's Sustainability Report for the calendar year 2023 (1<sup>st</sup> January 2023 – 31<sup>st</sup> December 2023)

This Assurance Statement has been prepared for KASIKORNBANK PUBLIC COMPANY LIMITED in accordance with our contract but is intended for the readers of this Report.

### Terms of engagement

LRQA Group limited was commissioned by KASIKORNBANK PUBLIC COMPANY LIMITED (KBank) to provide independent assurance on its Sustainability Report 2023 ("the report") using AccountAbility's AA1000AS v3, where the scope was a Type 2 engagement, and the assurance criteria below<sup>1</sup>.

A moderate<sup>2</sup> level of assurance and materiality of the professional judgment of the verifier has been used for assuring the report. The one exception is the direct and energy indirect GHG emission data where a high level of assurance and 5% materiality has been applied. Our assurance engagement covered KBank's operations and activities in Thailand and specifically the following requirements:

- Evaluating the nature and extent of KBank's adherence to the AA1000 AccountAbility Principles (2018):
  - Inclusivity, Materiality, Responsiveness and Impact.
- Confirming that the Report is in accordance with:
  - Materiality assessment
  - GRI Standards 2021, and
  - GRI Financial Services Sector Disclosure.
- Evaluating the reliability of data and information for only the selected environmental and social indicators listed below;
  - GRI 302-1: Energy consumption within the organization
  - GRI 303-3: Water withdrawal
  - GRI 303-4: Water discharge
  - GRI 303-5: Water consumption
  - GRI 305-1: Direct GHG emissions (scope 1)
  - GRI 305-2: Energy indirect GHG emissions (scope 2) – excluded purchasing of cooling
  - GRI 305-3: Other indirect GHG emission (Cat. 6 – business travel by taxicab and air travel and Cat. 15 – investments only)
  - GRI 306-3: Waste generated
  - GRI 306-4: Waste diverted from disposal
  - GRI 306-5: Waste directed to disposal
  - GRI 403-9 Work-related injuries (absenteeism only)
  - Initiatives to enhance financial inclusions (FSI)

Our assurance engagement excluded the data and information of KBank's operations and activities outside Thailand as well as suppliers, contractors and any third parties mentioned in the report.

LRQA's responsibility is only to KBank. LRQA disclaims any liability or responsibility to others as explained in the end footnote. KBank's responsibility is for collecting, aggregating, analysing, and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of KBank.

### LRQA's Opinion

Based on LRQA's approach

- the direct and energy indirect GHG emissions data in the report are materially correct;
- and nothing has come to our attention that would cause us to believe that KBank has not:
- met the requirements above
  - disclosed reliable performance data and information for the selected indicators
  - covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a combined level of assurance.

Note: The extent of evidence-gathering for a moderate level of assurance engagement is less than for a high level of assurance engagement. Moderate level assurance engagements focus on aggregated data whilst high levels of assurance checking source data from sites.

<sup>1</sup> <https://www.globalreporting.org>

<sup>2</sup> GHG quantification is subject to inherent uncertainty.

### LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing KBank's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this through interviews with external stakeholders and reviewing documents and associated records.
- Reviewing KBank's process for identifying and determining material issues to confirm that the right issues were included in their Report. We did this by benchmarking reports written by KBank and its peers to ensure that sector specific issues were included for comparability. We also tested the filters used in determining material issues to evaluate whether KBank makes informed business decisions that may create opportunities that contribute towards sustainable development.
- Auditing KBank's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.
- Sampling of evidence presented at KBank's head office in Bangkok to confirm the reliability of the selected indicators. The extent of evidence sampled for the selected indicators reflected the level of assurance applied.

### Observations

Further observations and findings, made during the assurance engagement, are:

- Stakeholder inclusivity: We are not aware of any key stakeholder groups that have been excluded from KBank's stakeholder engagement process. KBank has open dialogue with all of its stakeholders though the frequency with trade unions would benefit from more regular time intervals.
- Materiality: We are not aware of any material issues concerning KBank's sustainability performance that have been excluded from the report. It should be noted that KBank has established extensive criteria for determining which issue/aspect is material to its stakeholders and that these criteria are not biased to the company's management.
- Responsiveness: KBank has established and implemented processes for responding to the concerns of various stakeholder groups in relation to GHG emissions data.
- Impact: KBank should further address quantitative impacts regard human right topics in the future report.
- Reliability: Data management systems are properly defined for the selected GRI indicators. However, we believe that KBank should disclose GHGs emission related to energy imported from leasers in the future.

### LRQA's standards, competence and independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only work undertaken by LRQA for KBank and as such does not compromise our independence or impartiality.

Dated: 12 February 2024

Opart Charuratana

LRQA Lead Verifier

On behalf of LRQA (Thailand) Limited

No. 252/123 (C), Muang Thai – Phatra Complex Tower B,

26<sup>th</sup> floor, Ratchadaphisek Road., Huaykwang, Bangkok, 10310, THAILAND

LRQA reference: BGK00001043

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LRQA

## LRQA Independent Assurance Statement

### Relating to KASIKORNBANK PUBLIC COMPANY LIMITED's UNPRB report for the calendar year 2023 (1<sup>st</sup> January 2023 – 31<sup>st</sup> December 2023)

This Assurance Statement has been prepared for KASIKORNBANK PUBLIC COMPANY LIMITED in accordance with our contract but is intended for the readers of this Report.

#### Terms of engagement

LRQA Group limited was commissioned by KASIKORNBANK PUBLIC COMPANY LIMITED (KBank) to provide independent assurance on its PRB reporting and self-assessment template 2023 ("the report"), as the first assurance period using the requirements laid out in the Assurance Guidance to undertake limited assurance on Principles reporting, issued by UNEP FI and the assurance criteria below.

A limited level of assurance and materiality of the professional judgment of the verifier has been used for assuring the report. Our assurance engagement covered KBANK's operations and activities in Thailand and specifically the following requirements:

- Evaluating the nature and extent of KBank's report to the UNEP FI Principles reporting.
- Impact Analysis, Target Setting, Target Implementation and Monitoring and Governance Structure for Implementation of the Principles.

Our assurance engagement excluded the data and information of KBank's operations and activities outside Thailand as well as suppliers, contractors and any third parties mentioned in the report.

LRQA's responsibility is only to KBank. LRQA disclaims any liability or responsibility to others as explained in the end footnote. KBank's responsibility is for collecting, aggregating, analysing, and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of KBank.

#### LRQA's Opinion

Based on LRQA's approach and nothing has come to our attention that would cause us to believe that KBank has not:

- met the requirements above
- covered all the impact areas that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a limited level of assurance.

Note: The extent of evidence-gathering for a limited level of assurance engagement is less than for a reasonable level of assurance engagement. Limited level assurance engagements focus on aggregated data whilst reasonable levels of assurance checking source data from sites.

#### LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Reviewing KBank's process for identifying and determining most significant impacts to confirm that the right topics were included in their Report.
- Assessing of evidence presented at KBank's head office in Bangkok to confirm the reliability of the data and information. The extent of evidence sampled for the selected indicators reflected the level of assurance applied.

#### Observations

Further observations and findings, made during the assurance engagement, are:

- **Impact Analysis:**  
KBank has applied recognised Impact analysis tools for identify and analysis the impacts, where the outcomes are meaningful for implementing the PRB Principles.
- **Target Setting:**  
KBank has established Climate change targets focusing on the transition of commercial lending portfolio. However, we do believe that in the future report period, KBank will disclose the target for resource efficiency & Circularity as second area of most significant impact.
- **Target Implementation and Monitoring:**  
Hence KBank has initial setting the targets and transition pathway, we do believe that the future report period, KBank will disclose progress in implementation of such targets together with associated negative impact and action taken.
- **Governance Structure for implementation of the Principles:**  
KBank has implemented effective governance and a culture of responsible banking.

LRQA

#### LRQA's standards, competence and independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience for the template assurance. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification together with sustainability report are the only works undertaken by LRQA for KBank and as such does not compromise our independence or impartiality.

Dated: 5 March 2024

Opatt Charuratana

LRQA Lead Verifier

On behalf of LRQA (Thailand) Limited

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Certain statements shown in this report are forward-looking statements in respect of the financial position or the performance of KASIKORNTHAI PUBLIC COMPANY LIMITED ("KBank"). KBank has prepared such forward-looking statements based on several assumptions, and has relied on financial and other information available from public sources as of the date such statements were made. Statements containing words such as "expect", "believe", "estimate", etc. and other similar expressions, are considered as forward-looking statements which involve uncertainties and are subject to changes at any time due to future events, including but not limited to, changes in global/national economic, political and regulatory environment. Accordingly, the readers or the recipients of information shall carefully review this report and make their own independent decision as well as thoroughly evaluate such fact or information which may have changed prior to making any investment or entering into any transaction.



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